New Jersey Department of Environmental Protection

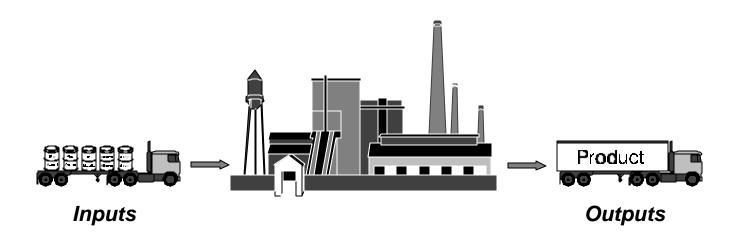
Bureau of Chemical Release Information and Prevention

Office of Pollution Prevention and Permit Coordination



NEW JERSEY RELEASE AND POLLUTION PREVENTION REPORT (RPPR or DEQ-114)

REVISED 2000 INSTRUCTIONS



Completion is Mandatory and Submission is due by JULY 1, 2001

April, 2001

Dear New Jersey Employer:

Enclosed is a copy of the New Jersey Release and Pollution Prevention Report (form RPPR, also known as DEQ-114) for the 2000 reporting year. The Department of Environmental Protection (DEP) uses this form to collect chemical throughput, multi-media environmental release, off-site transfer, and pollution prevention information. Your completed report is due to the DEP by July 1, 2001.

A Release and Pollution Prevention Report must be submitted by all "employers," as defined in the New Jersey Worker and Community Right to Know Act (N.J.A.C. 7:1G-1.2) that are required to submit one or more federal Toxic Chemical Release Inventory Reporting Forms (Form R) to the United States Environmental Protection Agency (USEPA) for reporting year 2000. All substances subject to reporting under the Toxic Chemical Release Inventory, Section 313 of the federal Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), must be reported on the Release and Pollution Prevention Report. A complete list of reportable substances is included with the instructions contained in this package. Be sure to take note of the new reporting requirements for Persistent, Bioaccumulative and Toxic (PBT) substances found in this reporting package.

Please note that the New Jersey threshold for reporting is 10,000 pounds for each reportable substance manufactured, processed, and otherwise used at the facility during reporting year 2000 unless the reportable substance is one of the newly regulated PBT substances added effective this reporting year. Sections C and D and the Pollution Prevention Process Level Data Worksheet (P2-115) are incorporated into this report to satisfy the annual pollution prevention progress reporting requirements for all facilities that were required to prepare a Pollution Prevention Plan and to submit to the DEP a Pollution Prevention Plan Summary (DEP-113).

Your attention is called to the five pages immediately following this letter. The first page provides important information regarding your responsibility to submit a copy of the USEPA TRI reports (Form R and Form A) to the State of New Jersey. The next four pages highlight specific 'DO's" and 'DON'Ts" and changes to the Release and Pollution Prevention Report for 2000. The changes were made for the following reasons: 1) to clarify the reporting requirements of the state's Community Right to Know and Pollution Prevention programs; 2) to maintain consistency with the reporting requirements of other New Jersey regulatory programs; and 3) to maintain consistency with the federal Toxic Chemical Release Inventory reporting requirements.

The Community Right to Know and Pollution Prevention programs are important elements of New Jersey's goal of becoming a sustainable state in which we and future generations will be able to maintain and enjoy a high quality of life. Elements of a sustainable state include strong communities, economic vitality, quality education, equity among all classes, races and genders, healthy people, and the minimization of pollution and waste. Information collected by the Release and Pollution Prevention Report helps us reach these goals by allowing us to be more aware of the potential chemical hazards present in the community and by providing specific information on how chemicals are used in and released from industrial processes.

If you require assistance with this report, please contact the Bureau of Chemical Release Information and Prevention at (609) 292-6714 regarding Sections A and B and the Office of Pollution Prevention and Permit Coordination at (609) 777-0518 for Sections C and D and P2-115. Thank you for your cooperation.

Sincerely,

Sincerely,

Jeanne Mroczko, Director Office of Pollution Prevention and Permit Coordination Shirlee Schiffman, Chief Bureau of Chemical Release Information and Prevention

ATTENTION TRI Form R & Form A Reporters

If you submit your 2000 federal Toxic Chemical Release Inventory (TRI) Form R and/or Form A report to the USEPA on diskette using USEPA's Automated Toxics Reporting System (ATRS00) software, the DEP will accept a copy of the data diskette, accompanied by a copy of the certification letter also filed with USEPA, to fulfill your requirement to provide your TRI Form R and/or Form A report(s) to the state of New Jersey.

NOTE: Only the <u>federal</u> <u>TRI</u> <u>data</u> may be submitted on diskette. The state 2000 Release and Pollution Prevention Report must be submitted on the forms enclosed.

PLEASE NOTE!

If you have been mailed this 2000 Release and Pollution Prevention Report (RPPR), you must complete and return *at the very least* Section A of the Report (see instructions, I.C "Who Must Submit The RPPR?," first paragraph on page 2 for more details).

DO	Be sure to return the <i>original version</i> of the RPPR to the DEP.
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Be sure to complete and include all Sections (A, B, C and D and P2-115), as appropriate. If you have any questions about Sections A or B of this RPPR, call the Bureau of Chemical Release Information at (609) 292-6714. If you have any questions about Sections C or D or P2-115 of this RPPR, call the Office of Pollution Prevention and Permit Coordination at (609) 777-0518.

DO Exercise due diligence in completing this Report.

DO Be sure that all entries are legible!

Round off estimated quantities to the nearest pound in Section B, questions 4 through 22. It may be to your advantage to use commas for data clarity in your entries for these questions. You may use decimal places *ONLY* for the Persistent, Bioaccumulative and Toxic (PBT) substances newly reportable for 2000.

Check Appendices B and C for the correct and complete spelling of all chemical names, and be sure to enter the correct Chemical Abstracts Service (CAS) registry number or Category Code number and the substance's RTK number.

Be sure to use the "Self-Verification of Materials Accounting Data Worksheet" found on page 21 of the instructions and check that your estimates are reasonable and comply with your expected level of data quality and accuracy. If any reportable substance at your facility is recycled out-of-process and reused on site, be certain to check your materials accounting on the self verification worksheet!

Make a copy of and then submit this report for any facility other than the one identified in "FACILITY LOCATION INFORMATION." If you need a RPPR for another regulated facility that must report for 2000, contact the Bureau of Chemical Release Information and Prevention at (609) 292-6714.

Make any changes to the preprinted FACID number on any pages of the form. This FACID is unique to your facility location. If you have questions about any ID numbers on the form, first check the instructions for their meaning. If you still have questions, call the Bureau of Chemical Release Information and Prevention at (609) 292-6714.

DO NOT Apply any unit of measurement other than pounds in Section B, questions 4 through 22. (Do note that the unit of measurement for Dioxin and Dioxin-like Compounds is "grams.")

DO NOT Write in any units of measurement (e.g. "pounds," "lbs." "###," etc.) in Section B, questions 4 through 22.

Use range codes A, B or C as found on the USEPA Form R for estimating any quantity of a release or transfer on Section B, questions 15 through 21 of this RPPR; enter only whole numbers as determined by your best estimate (unless you are reporting a PBT; then you may report fractions of pounds using a decimal place).

Important Changes for Reporting Year 2000

The following changes, corrections and updates have been made with respect to reporting on the Release and Pollution Prevention Report (RPPR, also known as DEQ-114) for 2000 pursuant to the requirements of the New Jersey Worker and Community Right to Know Act, the New Jersey Pollution Prevention Act, and subsequent regulations.

General Information

- One substance on Appendix B of the 1999 list triphenyltin chloride had an incorrect RTK Number listed. See Appendix B in this document for the correct RTK number.
- The de minimis level for atrazine has been changed from 0.1% to 1.0%.
- On June 27, 2000, USEPA published in the Federal Register (65 FR 39552) a final rule deleting phosphoric acid (CAS # 7664-38-2) from the list of toxic chemicals subject to the reporting requirements of ECPRA Section 313, the Toxic Chemical Release Inventory (TRI). Facilities are relieved of their obligation to report phosphoric acid for the 1999 reporting year and beyond.
- The Office of Pollution Prevention and Permit Coordination has prepared a "Pollution Prevention Process Level Data Worksheet (P2-115)" that may be submitted in lieu of Sections C and D of this RPPR (beginning with reporting year 1999). Refer to pages 23 through 26 for more information about this worksheet.
- On October 29, 1999 (64 Federal Register 58666) USEPA published a final rule under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) which lowers the EPCRA Section 313 (i.e. TRI) thresholds for certain persistent bioaccumulative toxic (PBT) chemicals and adds certain other PBT chemicals to the EPCRA Section 313 list of toxic chemicals. The rule also includes modifications to certain reporting exemptions and requirements for the chemicals newly subject to the lower reporting thresholds. These PBT chemicals are of particular concern not only because they are toxic but also because they remain in the environment for long periods of time, are not readily destroyed, and build up or accumulate in body tissue.

USEPA has eliminated the de minimis exemption for the PBT chemicals in the table below. USEPA has also excluded all PBT chemicals from eligibility for the alternate threshold of 1 million pounds for reporting on Form A and eliminated range reporting for on-site releases and off-site transfers for further waste management for the PBT chemicals affected by this rule. In the new rule USEPA has also provided guidance on the level of accuracy expected to be used when reporting for PBT chemicals.

USEPA continues the development of reporting guidance for dioxin and dioxin-like compounds and the other PBT chemicals. Information and documents are available on the USEPA TRI homepage at http://www.epa.gov/tri.

The final rule also added vanadium compounds to the EPCRA Section 313 list of toxic chemicals and expanded the listing for vanadium by removing the "fume and dust" qualifier. The new listing for reporting year 2000 is: "vanadium (except when contained in an alloy)." While the vanadium compounds category was added to the TRI list and the qualifier for vanadium was changed, they are not considered a PBT for the purposes of this rule.

Following is the list of PBT chemicals affected by the new rule, and their new reporting thresholds. An asterisk (*) indicates the PBT chemicals newly added to the EPCRA Section 313 list of toxic chemicals. Pursuant to the Worker and Community Right To Know Regulations (N.J.A.C 7:1G-1.1 et seq.) and the Pollution Prevention Program Rules (N.J.A.C 7:1K-1.1 et seq.), the New Jersey Environmental Hazardous Substance List for reporting year 2000 has been updated and the reporting requirements incorporated into these instructions.

Persistent, Bioaccumulative, and Toxic Chemicals covered by the USEPA Rule of October 29, 1999

	CAS#	Section 313 Reporting Threshold
Chemical Name or Chemical Category	(Category #)	(in pounds unless noted otherwise)
Aldrin	309-00-2	100
Benzo(g,h,l)perylene*	191-24-2	10
Chlordane	57-74-9	10
Dioxin and dioxin-like compounds category*1,2	N150	0.1 gram
Heptachlor	76-44-8	10
Hexachlorobenzene	118-74-1	10
Isodrin	465-73-6	10
Mercury	7439-97-6	10
Mercury compounds	N458	10
Methoxychlor	72-43-5	100
Octachlorostyrene*	29082-74-4	10
Pendimethalin	40487-42-1	100
Pentachlorobenzene*	608-93-5	10
Polychorinated biphenyls (PCBs)	1336-36-3	10
Polycyclic aromatic compounds category*3	N590	100
Tetrabromobisphenol A*	79-94-7	100
Toxaphene	8001-35-2	10
Trifluralin	1582-09-8	100

^{1.} manufacturing; and the processing or otherwise use of dioxin and dioxin-like compounds if the dioxin and dioxin-like

- 2. see Appendix C for the specific substances reportable under this category
- 3. two chemicals, benzo(j,k)fluorene (206-44-0) and 3-methylcholanthrene (56-49-5), were added to this category
- As noted previously, the new USEPA rule added "vanadium compounds" to the list of reportable substances and changed the listing for vanadium for reporting year 2000; the new listing for vanadium is: "vanadium (except when contained in an alloy)." While the vanadium compounds category was added to the TRI list and the qualifier for vanadium was changed, they are not considered a PBT for the purposes of this rule. See Appendices B and C for the correct and complete spelling of all chemical names, and be sure to enter the correct Chemical Abstracts Service (CAS) registry number or Category Code number and the substance's RTK number.

Section A. General Facility Information

Changes made to Section A for the 2000 reporting year are as follows:

Question #12 has been "reserved" as there is no Biennial Hazardous Waste Report for 2000.

Section B. Facility-Level Substance-Specific Information

Changes made to Section B for the 2000 reporting year are as follows:

- A new question regarding the reported substance and throughput data trade secret claims has been added as #1.4.
- A new "activity and use of the substance" has been added "as an impurity"under #2.2.e., Process the Substance.

compounds are present as contaminants in a chemical and if they were created during the manufacturing of that chemical

Question #6, Quantity Produced on Site, has been clarified to include the quantity of a substance produced as a transient, or non-isolated, intermediate whether intentional or unintentional.

- Question #23, Quanitity and Units of Production for the current year has been expanded to accommodate up to four (4) entries.
- Question #24, Quanitity and Units of Production for the previous year has been deleted. The remaining questions in this section have been renumbered.

Section C and Section D or alternately the Pollution Prevention Process Level Worksheet (P2-115)

The re-adopted Pollution Prevention Program rules, effective March 2000, include two progress reporting options. Both options are intended to provide information about progress that your facility has made toward the pollution prevention goals that were established in your Pollution Prevention Plan and reported to the Department in your Pollution Prevention Plan Summary. See pages 23 to 33 of these instructions for more details.

Important Notice Regarding Reporting Year 2001

On January 17, 2001 (66 FR 4500) USEPA published a final rule under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) that lowers the EPCRA Section 313 (i.e. TRI) manufacture, process and otherwise use thresholds for lead and lead compounds to 100 pounds under the category of Persistent, Bioaccumulative and Toxic (PBT) chemicals. The first reports at his lower threshold are due on or before July 1, 2002 for the 2001 calendar year. The lower reporting threshold does not apply to lead contained in stainless steel, brass, and bronze alloys. For the TRI, lead contained in stainless steel, brass, and bronze alloys remains reportable under the 25,000 pound manufacture and process reporting threshold and the 10,000 pound otherwise use reporting threshold. Remember that for the purposes of the NJ Release and Pollution Prevention Report and reporting of lead contained in stainless steel, brass, and bronze alloys, the manufacture, process and otherwise use thresholds are 10,000 pounds.

USEPA is eliminating the de minimis exemption for lead and lead compounds. USEPA is also excluding lead and lead compounds from eligibility for the alternate threshold of one million pounds under the TRI. Additional information and documents are available on the USEPA TRI homepage at http://www.epa.gov/tri.

Be sure to see Appendix G for "Questions and Answers" and "Commonly Noted Reporting Errors" regarding the Release and Pollution Prevention Report (RPPR) form, instructions and reporting requirements!

INSTRUCTIONS AND REFERENCE GUIDE FOR THE 2000 RELEASE AND POLLUTION PREVENTION REPORT

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INSTRUCTIONS FOR COMPLETING THE RELEASE AND POLLUTION PREVENTION REPORT (RPPR) FOR 2000

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY! THERE ARE NEW REQUIREMENTS FOR REPORTING YEAR 2000. If after reading the instructions you have any questions regarding Sections A or B, please call the Bureau of Chemical Release Information and Prevention at (609) 292-6714. If you have any questions regarding the Pollution Prevention progress reporting requirements of Sections C or D or P2-115, call the Office of Pollution Prevention and Permit Coordination at (609) 777-0518.

I. INTRODUCTION

A. GENERAL INFORMATION

Section 313 of the federal Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA, also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 [SARA] [P.L. 99-499]) requires manufacturing sector facilities within Standard Industrial Classification (SIC) codes 20 through 39 and select non-manufacturing sector facilities to complete the Toxic Chemical Release Inventory (TRI) Reporting Form (Form R), if certain manufacturing, processing, or otherwise use activity thresholds are met. Activity definitions are provided in the instructions on pages 11 and 12 and in Appendix A.

The New Jersey Release and Pollution Prevention Report (RPPR or DEQ-114) is required by the DEP pursuant to the NJ Worker and Community Right to Know Act (P.L. 1983, c.315, N.J.S.A. 34:5A-1.1 et seq.), the NJ Pollution Prevention Act (P.L. 1991, c.235, N.J.S.A. 13:1D-35 et seq.) and the regulations adopted pursuant to these state laws for any facility that is required to submit a TRI Form R. The Release and Pollution Prevention Report is divided into five parts for reporting year 2000: Sections A, B, C and D and the Pollution Prevention Process Level Data Worksheet (P2-115).

B. THE NJ RELEASE AND POLLUTION PREVENTION REPORT (RPPR)

Information to be provided in Section A pertains to the facility site and its overall operations. Only one original copy of Section A is to be submitted for each reporting facility. Section B consists of questions concerning chemical throughput, environmental release and off-site transfer data, as well as some general pollution prevention activity data, about each specific reportable substance subject to the RPPR reporting requirements. One RPPR Section B form must be completed for each reportable substance that was manufactured, processed, or otherwise used in excess of 10,000 pounds or the lower PBT threshold, if applicable, in 2000. Section C consists of questions focused on facility-level pollution prevention progress about each specific reportable substance subject to the pollution prevention reporting requirements. Section D consists of questions focused on pollution prevention progress for substances within targeted processes or targeted grouped processes identified in a facility's Pollution Prevention Plan. The P2-115 worksheet may be submitted for each reportable substance in place of Sections C and D for that substance. Copies of blank Sections B, C and D forms and the P2-115 should be made before you begin to fill out the report.

C. WHO MUST SUBMIT THE RPPR?

The Release and Pollution Prevention Report must be submitted by every "employer" (N.J.A.C. 7:1G-1.2) that is required to submit one or more federal Toxic Chemical Release Inventory Reporting Forms (Form R) to the USEPA for the 2000 reporting year. The New Jersey list of reportable substances is included as Appendices B and C. The RPPR is to be received from every employer to whom the DEP mails it. If the federal reporting thresholds are not exceeded and, therefore, no Form R submission is required, complete only questions 1.1 through 1.5, 11 and 16 of Section A of the RPPR and submit this information to the Bureau of Chemical Release Information and Prevention. See page 34 for mailing instructions.

SUBMITTAL OF THIS COMPLETED REPORT BY JULY 1, 2001 IS MANDATORY. FAILURE TO RETURN THE RELEASE AND POLLUTION PREVENTION REPORT MAY RESULT IN ENFORCEMENT ACTION AGAINST YOUR COMPANY. YOU ARE REQUIRED TO COMPLETE AND RETURN THE <u>ORIGINAL</u> RELEASE AND POLLUTION PREVENTION REPORT TO DEP AND TO SEND A COPY TO YOUR COUNTY LEAD AGENCY (SEE APPENDIX D). IN ADDITION, YOU MUST MAINTAIN A FILE OF ALL RIGHT TO KNOW SURVEYS (REPORTS) AND MAKE THESE SURVEYS (REPORTS) AVAILABLE TO YOUR EMPLOYEES UPON REQUEST.

D. NOTES ON COMPLETING THE RPPR

A listed reportable substance does not have to be considered when making threshold determinations and chemical throughput, environmental release, off-site transfer and waste management calculations if it was present in a mixture at a concentration below a specified de minimis level. The de minimis level is 1.0%, or 0.1% if the substance meets the OSHA carcinogen standards. See Appendices B and C for the de minimis value associated with each listed reportable substance. The de minimis exemption does not apply to the "manufacture" of a substance except if that substance is "manufactured" as an impurity and remains in the product distributed in commerce, or if the substance is "imported" below the appropriate de minimis level. The de minimis exemption does not apply to a byproduct "manufactured" coincidentally as a result of "manufacturing," "processing," "otherwise use," or any waste management activities. The de minimis exemption does not apply to the persistent, bioaccumulative and toxic (PBT) substances newly reportable for 2000.

Complete all sections of the RPPR as they pertain to your facility or plant site. If a section does not apply to your operations, write in "N/A" for "not applicable" or check the appropriate "N/A" box when available.

It is intended that you use existing or readily available data to complete the Release and Pollution Prevention Report. Where quantities can be determined from existing records (e.g. inventory or production figures) or test results are available, actual figures are to be supplied. Otherwise, best estimates may be given. You may use engineering estimates and computations; process material balance studies; field tests or measurements made by the facility; or other technically sound practices. While USEPA requires no more than two significant integers when reporting releases and off-site transfers on the Form R, this practice is not encouraged on the RPPR. DEP encourages the reporting of any estimated quantity to the nearest full pound as calculated or estimated. The simplified mass balance approach of the RPPR provides for the analysis of materials accounting procedures and for the assessment of discrepancies in the materials accounting process. These analyses are conducted by DEP with the knowledge that some quantities are the best available estimates of the "true" value. It is important that you retain documentation of your calculation methods.

If you do not know the formulation of trade name chemicals used in your facility operations, you should make inquiries of your supplier or the manufacturer to ascertain whether the mixture contains any reportable substances. Since employers that report under EPCRA Section 313 and New Jersey Community Right to Know must know the chemical composition of the products they use to be able to accurately calculate use, releases, off-site transfers, etc., USEPA requires suppliers of mixtures or trade name products containing one or more of the Section 313 listed chemicals to notify their customers of the presence of those chemicals (supplier notification rule).

If you desire, you may attach process descriptions, explanatory notes, flow charts, lists, etc., that will assist in clarifying entries made on the report if you feel the answers require further explanation. When information needed to complete a section is not readily available, you are required to make a reasonable effort to acquire the information. If you still can not obtain the necessary information after a reasonable effort is conducted, provide a written explanation describing the nature of the operations involved and the reasons for not supplying the data.

E. THE TOXIC CHEMICAL RELEASE INVENTORY FORM R ALTERNATE THRESHOLD

On November 30, 1994, USEPA adopted a rule (59 FR 61488) that established an alternate threshold under Section 313 of EPCRA (the Toxic Chemical Release Inventory) for those facilities with "low annual reportable amounts" of a listed toxic chemical. A facility that meets the current Section 313 reporting thresholds, but estimates that the total annual reportable amount (i.e. Form R, Section 8.1 through 8.7, Column B) of the chemical does not exceed 500 pounds per year, can take advantage of an alternate manufacture, process, or otherwise use threshold of one million pounds per year, for that chemical. The total annual reportable amount is also known as "total production-related waste" or, as DEP calls it, "total nonproduct output." (You can refer to page 17, question #11 of these instructions for a definition of total nonproduct output.) A TRI facility that meets the alternate threshold reporting criteria for any chemical may submit the *Toxic Chemical Release Inventory Form A* in lieu of a full Form R. For further information on the USEPA alternate threshold, contact the EPCRA Hotline at 1(800) 535-0202.

Note: New Jersey's applicable laws and regulations have no counterpart to accommodate the low release threshold on the Release and Pollution Prevention Report. Therefore, if you are a TRI covered facility, that is if you submit one or more TRI Form R to the USEPA for 2000, then you must complete a Section B of this RPPR for each substance listed in Appendices B and C that is manufactured, processed or otherwise used in excess of 10,000 pounds or the lower PBT threshold in 2000.

F. REPORTING OF PERSISTENT, BIOACCUMULATIVE AND TOXIC (PBT) CHEMICALS

On October 29, 1999 (64 Federal Register 58666) USEPA published a final rule under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), which lowers the EPCRA Section 313 (i.e TRI) thresholds for certain persistent, bioaccumulative and toxic (PBT) chemicals and adds certain other PBT chemicals to the EPCRA Section 313 list of toxic chemicals effective reporting year 2000. The rule also includes modifications to certain reporting exemptions and requirements for the chemicals newly subject to the lower reporting thresholds. These PBT chemicals are of particular concern not only because they are toxic but also because they remain in the environment for long periods of time, are not readily destroyed, and build up or accumulate in body tissue. See page iv and B–2 for the list of chemicals and the new reporting thresholds.

USEPA has eliminated the de minimis exemption for the PBT chemicals. Users of mixtures must use best readily available information to determine the PBT chemicals present and their concentrations. USEPA has also excluded all PBT chemicals from eligibility for the alternate threshold of 1 million pounds for reporting on Form A and eliminated range reporting on the Form R for on-site releases and off-site transfers for further waste management for the PBT chemicals affected by this rule.

Pursuant to the NJ Worker and Community Right to Know Regulations (N.J.A.C. 7:1G-1.1 et seq.) the PBT chemicals are to be reported on Section B of the RPPR for 2000 at the new threshold as well. Pollution prevention planning information (i.e. Sections C and D or the P2-115) is not required for reporting year 2000 on the PBTs, except for those substances that were already on the list, were included in your P2 Plan with Plan Summary information submitted to the DEP, and now the thresholds are lower in year 2000.

For the PBTs, and only the PBTs, you may report fractions of a pound using a decimal place and the USEPA guidance on data accuracy and precision. Report chemical throughput, releases and other waste management activities at a level of precision supported by the data and estimation techniques used. For PBT chemicals, 0.1 pound is the smallest amount required to be reported (except for dioxin and dioxin-like compounds). Throughput, release and other waste management estimates 0.05 pounds can be rounded down to 0 pounds. **NOTE** that for "dioxin and dioxin-like compounds" the unit of measurement is grams or fractions of a gram (and not pounds even though the RPPR form will state "pounds" for the various quantitative fields). For dioxin and dioxin-like compounds, 100 micrograms (equals 0.0001 gram) is the smallest amount required to be reported. Throughput, release and other waste management estimates 50 micrograms (equals 0.0005 gram) can be rounded to 0 grams. While the above text indicates the smallest amount required to be reported, if estimation techniques allow for the reporting of smaller quantities, you may do so. Data precision and the quantities reported are dependent upon the accuracy and quality of the data and the estimation techniques used.

G. HOW TO PREPARE A VOLUNTARY REVISION OF A PREVIOUS SUBMISSION

Revisions (voluntary or otherwise) to the Release and Pollution Prevention Report (RPPR) may impact data reported on the Toxic Chemical Release Inventory Reporting Form (Form R) and vice versa. It is important to exercise due diligence in the preparation of both forms.

Should you find that a revision to the RPPR is necessary, the following procedure is to be followed:

- > make a copy of the original submission (only the page or pages that need to be revised),
- cross out the incorrect information in red ink,
- enter the corrected information in red ink (in space to the right, left, above or below the original entry as space permits),
- indicate "Revision" at the top of each page, making certain that the New Jersey CRTK facility identification number and substance name and CAS number are clearly noted on each page, and
- submit to the NJDEP Bureau of Chemical Release Information and Prevention at the address listed on page 34.

II. INSTRUCTIONS FOR COMPLETING SECTIONS A & B OF THE RPPR

Please type, or print legibly, all responses on the Release and Pollution Prevention Report.

A. SECTION A. GENERAL FACILITY INFORMATION

Section A of the Release and Pollution Prevention Report must be completed, signed, and returned whether or not your facility is also submitting one or more Sections B, C and P2-115 forms containing substance-specific information or, in the case of Section D, process-level information.

Some information is pre-printed by the DEP on the RPPR. Following is a description of that pre-printed information:

MAILING ADDRESS INFORMATION

This label is located on the upper left corner of Section A and contains identification numbers for your facility and the current mailing address on record with the department. Listed in order of appearance, the identification numbers are:

CRTK Facility Identification Number (FAC ID) 11 digits

Standard Industrial Classification (SIC) Code 4 digits

These numbers are unique identifiers for each facility location. <u>DO NOT</u> make changes to the identification numbers in this section.

Review all information on the preprinted label. If information on the <u>mailing</u> address label or contact name is incorrect, indicate changes directly on the mailing address.

FACILITY LOCATION INFORMATION

This label is located on the upper right corner of Section A and contains the current facility location information on record with the department. If your facility location has changed from the location indicated on this label, make location changes directly on the label. <u>Do not</u> make changes to the identification numbers in this section. Listed in order of appearance, the identification numbers are:

CRTK Facility Identification Number (FAC ID) 11 digits

New Jersey County/Municipality Code 4 digits (This is not a repeat of the SIC code found on the Mailing Address Label!)

The following are specific instructions for completing each part of the Release and Pollution Prevention Report (RPPR) for 2000. The number designations of these instructions correspond to those in the RPPR unless otherwise indicated.

Questions 1 through 16:

- 1.1 Person to contact regarding this report Enter the full name of the person who may be contacted for clarification of the information submitted in this report.
- 1.2 Title Enter the title of the contact person.

- 1.3 Phone number Enter the telephone number (including the area code) for the contact person identified in #1.1.
- 1.4 Fax # Enter the telefax number (including the area code) for the contact person identified in #1.1.
- 1.5 Contact's address Enter the full mailing address (including street and/or box number, city, state, and zip code) for the person identified in #1.1, if different from the mailing address information.
- 2. Nature of business Briefly describe the nature of the business activity conducted at the reporting facility.
- 3. Centroid Coordinates Enter the state plane coordinates of the facility. Pursuant to the pollution prevention reporting requirements (N.J.A.C. 7:1K), facilities are required to provide centroid coordinates. These coordinates are not the facility's latitude and longitude coordinates! Do not use commas or decimals points in presenting this data!

"State plane coordinates" means a system in the horizontal plane describing the position of points or features with respect to other points in New Jersey. The official survey base of the State of New Jersey is known as state plane coordinates whose geodetic positions have been adjusted on the North American Datum of 1983 (NAD83) as per Chapter 218, Laws of NJ 1989. Points along the east-west axis are the x-coordinates (#3.1). Points along the north-south axis are the y-coordinates (#3.2). The centroid is the point on the facility property that is considered its center.

Centroid coordinates in New Jersey state plane feet can be obtained from a licensed surveyor, from Global Positioning System (GPS) technology, or can be determined with the use of a straight edge and a 1991 DEP photoquadrangle map or a 7.5 minute USGS topographic atlas sheet (topoquad) of the quadrangle that includes the facility.

To determine your facility's coordinates in state plane feet from a photoquad or topoquad map, you must first obtain the correct map. Paper prints of these maps are available in 1:24,000 or 1:12,000 scales from the DEP's *Maps and Publications Sales Office, P.O. Box 438, Trenton, NJ 08625-0438.* The telephone number is (609) 777-1038. Order the map by quadrangle name. To determine the quadrangle name, refer to the grid of New Jersey in Appendix E and locate the quadrangle that includes your facility. Refer to the name and number of the quad. A map costs \$5.00 (includes postage and handling). (Quarter quad maps, 1:12,000 scale are also available for \$5.00.) Make checks payable to "Treasurer, State of New Jersey." The Maps and Publications Office also accepts faxed orders with a credit card. Use the *Maps and Publications Order Form* found in Appendix F (page F-2); be sure to include the credit card number, expiration date and signature and fax to 609-292-3285. Visa, MasterCard and Discover accepted.

DEP photoquad and topoquad basemaps include state plane feet coordinates in NAD83 along the horizontal (the "x" coordinate) and the vertical (the "y" coordinate) in the form of a 5,000 foot grid. State plane coordinate values, in NAD83 feet, appear at the edge of every other intersection of the map edge (neat line) and the grid and are generally a six-digit number.

To determine your facility's coordinates, locate a point in the approximate center of the facility. This point is the facility centroid. Then locate the nearest grid lines in both the horizontal and vertical directions. Determine the value of these grid lines by referring to the edge of the map. For the facility's "x" coordinate value, measure the distance to the right or left of the vertical grid line closest to the facility centroid. If the facility centroid is to the right of the grid line, add at a rate of 2,000 feet per inch to the grid line value until you hit the centroid. If the facility centroid is to the left of the grid line, subtract at the same rate (2,000 feet per inch) from the grid line value

until you locate the centroid.

Similarly, for the "y" coordinate, locate the value of the nearest horizontal grid line. If your facility is above the grid line, add at a rate of 2,000 feet per inch to the value of the grid line until you locate the centroid. Subtract at the same rate if the facility centroid is below the grid line.

Quarterquad basemaps may also be used to determine facility centroid coordinates. Since quarterquads are a different scale (1:12,000), use the same methodology but add or subtract at a rate of 1,000 feet per inch. Please remember that the old 1986 DEP photoquads and quarterquads can not be used for this because they are not referenced in the new NAD83. Consultants may be able to convert these older values for you, however.

Enter the "x" coordinate value in #3.1 and the "y" coordinate value in #3.2.

- 4. Federal Employer Identification Number Enter the FEIN or the federal tax ID number for the company (not your New Jersey Tax number).
- 5. TRI Facility ID Number If you have submitted a Form R for previous reporting years, a TRI Facility Identification Number has been assigned to your facility by the U.S. Environmental Protection Agency (USEPA). Enter "NA" in this space for the TRI Facility ID Number if this is your first submission, or if the number is not known.
- 6. USEPA (RCRA) Hazardous Waste ID Number Provide the USEPA identification number assigned to the facility. The USEPA ID number is a 12-character ID number assigned by either USEPA or DEP to each hazardous waste generator, transporter, and treatment, storage, or disposal facility. The first two characters are alphabetical and stand for the state in which the facility is physically located. The third character can be either alphabetic or numeric. The remaining nine characters are always numeric (e.g. NJD123456789). (This is the same number as entered on the 2000 Form R, Part I, Section 4.8.)
- 7. NJ Air Pollution Control Facility ID Number Provide the Air Pollution Control facility identification number assigned by DEP to the facility for permitted air emissions.
- 8. NJPDES ID Number (surface water) Provide the New Jersey Pollution Discharge Elimination System identification number assigned by DEP to the facility for permitted surface water discharges.
- 9. NJPDES ID Number (groundwater) Provide the New Jersey Pollution Discharge Elimination System identification number assigned by DEP to the facility for permitted groundwater discharges.
- 10. NJ RTK Research & Development Laboratory exemption approval number If this facility has an approved NJ RTK Research & Development Laboratory exemption pursuant to N.J.A.C. 7:1G, provide the exemption approval number for the facility.
- 11. 2000 USEPA Form R Indicate whether this facility is subject to filing with the USEPA one or more Toxic Chemical Release Inventory Reporting Forms (Form R) for calendar year 2000.
- 11.1. Indicate the number of TRI Form R submitted pursuant to the reporting requirements for reporting year 2000.
- 11.2. Indicate the number of TRI Form A (Alternate Threshold form) submitted pursuant to the reporting requirements for reporting year 2000.

- 12. This question is "reserved" for reporting year 2000. (This question refers to the applicability of the Hazardous Waste Generator Biennial Report to your facility. The Biennial Report is due in an even year for the previous odd year and, therefore, is not applicable to reporting year 2000.)
- 13. Wastewater Discharges Employers are reminded that these questions pertain to overall processes at the facility, <u>not</u> to the individual reportable substances.
- Provide the name (#13.1a) and physical address (#13.1b) for the publicly owned treatment works (POTW) plant to which your facility discharged wastewater containing reportable substances in 2000, if applicable. (This is the same information as entered on the 2000 Form R, Part II, Section 6.1.) Estimate the average daily volume of wastewater discharged (#13.1c). Briefly describe pretreatment methods (#13.1d), if any, prior to discharge.
- 13.2 Provide the name of the receiving stream(s) (#13.2a) to which your facility discharged wastewater containing reportable substances in 2000, if applicable. (This is the same information as entered on the 2000 Form R, Part II, Section 5.3.) Estimate the average daily volume of wastewater discharged (#13.2b). Briefly describe pretreatment methods (#13.2c), if any, prior to discharge.
- 13.3 Estimate the average daily volume of wastewater containing reportable substances discharged to groundwater in 2000 (#13.3a), if applicable,. Briefly describe pretreatment methods (#13.3b), if any, prior to discharge.
- 14. Trade Secret Claim If a facility owner or operator wishes to file a trade secret claim for information required on the RPPR, contact the Bureau of Chemical Release Information and Prevention for the "Trade Secret Claim Instructions (DEQ-119)." All trade secret claims will require full documentation unless otherwise specified in the "Trade Secret Claim Instructions." All trade secret documentation must be attached to the Release and Pollution Prevention Report and submitted to the department by July 1, 2001. Under the New Jersey Worker and Community Right To Know Act and regulations, information concerning the generation, treatment, or destruction of nonproduct output including, but not limited to, environmental releases and off-site transfers of reportable substances may not be claimed as a trade secret.
- 14.1 Indicate whether this RPPR contains trade secret claims for any information provided within any Section B of this report.
- 14.2 Indicate whether this RPPR contains trade secret claims for any information provided within any Section C or D of this report.
- 15. Waste Hauler Information Provide the full names and locations (including street, city, state and zip code) <u>and</u> the USEPA ID#, if applicable, <u>or</u> Solid Waste Transporter Registration Identification Number, of the hauler services that transported wastes containing the reported substances to off-site locations in 2000. (The Solid Waste Transporter Registration ID# is a five digit number assigned by DEP. If you only have a four digit number, add a zero to the beginning of the number, e.g. "1234" is entered as "01234.")
- 16. Certification of Employer or Duly Authorized Representative Type, or print legibly, the full name and title of the company official with responsibility for facility management and who is authorized to certify, on behalf of the company, that all statements are believed to be true, accurate and complete. This certification section must be signed and dated by the authorized official.

B. SECTION B. FACILITY-LEVEL SUBSTANCE-SPECIFIC INFORMATION

COMPLETE ONE SECTION B FOR EACH REPORTABLE SUBSTANCE THAT WAS MANUFACTURED, PROCESSED, OR OTHERWISE USED IN EXCESS OF 10,000 POUNDS OR THE LOWER PBT THRESHOLD IN 2000.

B.1 New Jersey Threshold of 10,000 Pounds

Pursuant to the reporting requirements established by the New Jersey Pollution Prevention Act and subsequent regulations, any facility that is required to complete one or more federal Toxic Chemical Release Inventory Reporting Forms (Form R) must complete a New Jersey Release and Pollution Prevention Report for all substances listed in Appendices B and C that exceeded a 10,000 pound threshold for manufacture, process, or otherwise use in 2000. Therefore, you may be required to report additional substances on the Release and Pollution Prevention Report that were not subject to reporting on the Form R. Remember that the thresholds for the Persistent, Bioaccumulative and Toxic (PBT) chemicals are lower than 10,000 pounds! Conversely, if the federal thresholds were not exceeded for any substance or if your facility submits TRI Form A only, then only Section A (questions 1.1 through 1.5, 11 and 16) of this report must be completed and submitted by July 1, 2001. Once an activity (manufacture, process, or otherwise use) threshold is exceeded, chemical throughput, environmental release, on-site management, off-site transfer, and pollution prevention data must be provided for all activities involving the reportable substance.

B.2 Threshold Determinations for and Reporting of Ammonia (anhydrous and aqueous)

On June 30, 1995 (60 FR 34182), USEPA issued a final rule that 1) modified the ammonia reporting requirements (60 FR 34172), and 2) deleted ammonium sulfate (solution) and ammonium nitrate (solution) because these and other aqueous ammonium salts are addressed under the ammonia listing. The listing for ammonia now presents the modifier "includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing." The qualifier for ammonia means that anhydrous forms of ammonia are 100 percent reportable and aqueous forms are limited to 10 percent of total aqueous ammonia. Therefore, when determining threshold quantities, 100 percent of anhydrous ammonia is included but only 10 percent of total aqueous ammonia is included. If any ammonia evaporates from aqueous ammonia solutions, 100 percent of the evaporated ammonia is included in threshold determinations and materials accounting calculations.

With respect to this federal rule, the DEP, using available data, recognized that the rule and its accompanying modifications of the ammonia listing had serious implications concerning materials accounting. For those facilities that manufacture, process and/or otherwise use both anhydrous and aqueous forms of ammonia, and, therefore, must report environmental releases and/or off-site transfers of ammonia, there is a good probability that a balance in the materials accounting process will not be achieved based upon the reporting of 100% of anhydrous ammonia and 10% of total aqueous ammonia. If you have any questions about this matter or need assistance, please call the Bureau of Chemical Release Information and Prevention at (609) 292-6714.

B.3 Threshold Determinations for and Reporting of Chemical Categories

A number of chemical compound categories are subject to reporting (see Appendix C). When reporting for one of these chemical categories, all individual members of the category that are manufactured, processed, or otherwise used must be totaled and figured into the threshold determination. However, threshold determinations are to be made separately for each of the three defined activities (i.e. manufacture, process, and otherwise use).

Threshold determinations for metal-containing compounds present a special case. For example, if you process several different lead compounds, then you base your threshold determination on the total weight of all lead compounds processed. However, if you process both the "parent" metal (lead, CAS# 7439-92-1) as well as one or more lead compounds, then you must make individual threshold determinations for each because they are separately listed reportable substances. If the thresholds for both the parent metal and compounds of that same metal are exceeded, you may file one combined report (e.g. one Section B for "lead compounds, including lead") because the inventory, throughput, environmental release, off-site transfer, and pollution prevention information you report in connection with metal compounds will be the total pounds of the parent metal only.

One other case involving metal compounds should be noted. Some metal compounds may contain more than one listed metal. For example, lead chromate is both a lead compound and a chromium compound. In such cases, if the 10,000 pound activity threshold is exceeded, you are required to file two separate Section B reports – in this case one for lead compounds and one for chromium compounds. You would apply the total weight of the lead chromate to the threshold determination for both lead compounds and chromium compounds. If the threshold is exceeded for these categories, the amount of each parent metal (i.e. lead and chromium) would be reported for inventory, throughput, release, transfer, and pollution prevention activities (not the amount of the compound) on each separate Section B form.

B.4 Reporting of Substance-related Information

- 1.1 CAS Number (Category Number) Report the Chemical Abstracts Service (CAS) registry number for the substance being reported. Use the CAS numbers provided in Appendix B. When reporting any of the 30 chemical compound categories, enter the appropriate Category Code number from Appendix C.
- 1.2 RTK Substance Number Enter the RTK substance number for the substance being reported. Refer to Appendices B and C for the RTK substance numbers.
- 1.3 Substance Name (Category Name) Enter the full and appropriate name of the substance being reported. Refer to Appendices B and C for the list of reportable substances that are required to be reported on the Release and Pollution Prevention Report.

When reporting substances in any of the 30 compound categories which appear on the reportable substance list (Appendix C), follow these guidelines: on a separate attachment that includes your facility id (FAC_ID) and facility name, provide a list of the CAS numbers and chemical names of any substances present at your facility which are being reported under the applicable compound category. For example, if you report "Cyanide Compounds" on the RPPR, Section B, your list might include "hydrogen cyanide (CAS# 74-90-8)" and "sodium cyanide (CAS# 143-33-9)." CAS numbers are available from material safety data sheets (MSDS) or most standard chemical reference books.

Second, when reporting a compound category in Section B, you are required to complete the information for the chemical category only, <u>not</u> each individual substance in the category. As clarified below in #2, metals are to be quantified as the parent metal only.

- 1.4 Substance-Specific Trade Secret Claim Indicate whether any throughput data, Section B questions #5 through #10 have been claimed trade secret on this RPPR checking "yes" or "no." Note that questions #5.1 and #10.1 can not be claimed trade secret, as they have to do with nonproduct output. To make a valid claim you must obtain and submit the "Trade Secret Claim Instructions (DEQ-119)" package (refer to these instructions for Section A question #14 and then follow the trade secret claims instructions precisely). A TSC claim will be voided if the procedures are not observed.
- 2. Activities and Uses of the Substance at the Facility Indicate whether the substance is

manufactured (including imported), processed, or otherwise used at the facility and the general nature of such activities and uses at the facility during the calendar year. Report activities that take place only at your facility, not activities that take place at other facilities involving your products. You must check all the blocks in this section that apply! The response to this question should be the same as entered on USEPA Form R, Part II, Sections 3.1 through 3.3. If you are a manufacturer of the substance (which by definition includes importing the substance), you must check "a" and/or "b," and at least one of "c," "d," "e," or "f." Refer to the definitions of "manufacture," "process," and "otherwise use" which follow and are also found in Appendix A.

With respect to the activities and uses of metals and metal compounds, there is a necessary clarification regarding the reporting requirements of the RPPR. Any specific metal or metal compound may be "processed" (as a formulation component) to formulate another metal compound. Some metals (with qualifying conditions) may be "manufactured," while others may be "otherwise used." The appropriate activities should be indicated (checked) in questions #2.1, #2.2, and #2.3, and then the estimated amount of the parent metal only is to be reported for inventory, throughput, environmental release, off-site transfer, and pollution prevention activities. While a metal compound may be formulated by processing the parent metal or another metal compound, or a parent metal may be extracted by processing a metal compound, the "quantity produced on site" (question #6) is zero because the facility is not actually manufacturing the parent metal.

There is an <u>exception</u> in the case of aluminum and zinc with the "<u>fume or dust"</u> qualifier. For these two metals ("fume or dust" form), if you manufacture, process, or otherwise use the qualified form, the appropriate activity threshold must be exceeded to initiate reporting. If "fume or dust" is manufactured, the quantity manufactured would then be reported in question #6.

- 2.1 Manufacture the Substance Persons who manufacture (including import) the reportable substance must check at least one:
 - a. Produce The substance is produced at the facility.
 - b. Import The substance is imported by the facility into the Customs Territory of the United States.

And check at least one:

- c. For on-site use/processing The substance is produced or imported and then further processed or otherwise used at the same facility. If you check this block, you must also check at least one item in #2.2 or #2.3.
- d. For sale/distribution The substance is produced or imported specifically for sale or distribution outside the manufacturing facility.
- e. As a byproduct The substance is produced coincidentally during the production, processing, otherwise use, or disposal of another substance or mixture and, following its production, is separated from that other chemical substance or mixture. Substances produced and released as a result of waste treatment or disposal are also considered byproducts.
- f. As an impurity The substance is produced coincidentally as a result of the manufacture, processing, or otherwise use of another substance, but is not separated and remains primarily in the mixture or product with that other substance.

2.2 Process the Substance (incorporative activities)

- As a reactant A natural or synthetic substance used in chemical reactions for the manufacture of another chemical substance or of a product. Examples include, but are not limited to, feedstocks, raw materials, intermediates, and initiators.
- b. As a formulation component A substance added to a product (or product mixture) prior to further distribution of the product that acts as a performance enhancer during use of the product. Examples of substances used in this capacity include, but are not limited to, additives, dyes, reaction diluents, initiators, solvents, inhibitors, emulsifiers, surfactants, lubricants, flame retardants, and rheological modifiers.
- c. As an article component A chemical substance that becomes an integral component of an article distributed for industrial, trade, or consumer use. One example is the pigment components of paint applied to a chair that is sold.
- d. Repackaging Processing or preparation of a substance (or product mixture) for distribution in commerce in a different form, state or quantity. This includes, but is not limited to, the transfer of material from a bulk container, such as a tank truck to smaller containers such as cans or bottles.
- e. As an impurity The substance is processed but is not separated and remains primarily in the mixture or other trade name product with that/those other chemical(s).

2.3 Otherwise Use the Substance (non-incorporative activities)

- a. As a chemical processing aid A substance that is added to a reaction mixture to aid in the manufacture or synthesis of another chemical substance but is not intended to remain in or become part of the product or product mixture. Examples of such substances include, but are not limited to, process solvents, catalysts, inhibitors, initiators, reaction terminators, and solution buffers.
- b. As a manufacturing aid A substance that aids the manufacturing process but does not become part of the resulting product and is not added to the reaction mixture during the manufacture or synthesis of another chemical substance. Examples include, but are not limited to, process lubricants, metalworking fluids, coolants, refrigerants, and hydraulic fluids.
- c. Ancillary or other use A substance in this category is used at a facility for purposes other than as a chemical processing aid or manufacturing aid as described above. Examples include, but are not limited to, cleaners, degreasers, lubricants, fuels, listed substances used for treating wastes, and listed substances used to treat water at the facility.
- 3.1 Principal Method of Storage Briefly describe the predominant type of container in which the substance is stored on site at the facility. Refer to Table 1, below. Include the container code listed. If you have a container other than the ones listed, use code OT, "other," and provide a description of the container.

TA - above ground tank TB - below ground tank TI - tank inside building CY - cylinder	Table 1: Storage Container Codes		
DS - steel drum DP - plastic drum BP - bottle or jug (glass) BP - bottle or jug (plastic) BN - tote bin CN - can TW - tank wagon CB - carboy RC - rail car	TB - below ground tank TI - tank inside building DS - steel drum DP - plastic drum DF - fiber drum CN - can	BX - box CY - cylinder BG - bottle or jug (glass) BP - bottle or jug (plastic) BN - tote bin TW - tank wagon	

3.2 and 3.3

Frequency of Transfer and Methods of Transfer - List the average frequency and the predominant method of transfer used at the facility for the reported substance.

Example: A. "3" times per "week" - "Pneumatic conveying"

B. "2" times per "month"

- "Pumping" (specify submerged or splash fill)

C. "8" times per "day" - "Manual bag dumping"

<u>Note:</u> Please restrict the designation of the frequency of transfer to three (3) characters; for example, if the frequency is 1,000 times per year, divide by 12 to report "83 times per month" or divide by 52 to report "19 times per week." In other words, do not report more than "<u>999</u> times per <u>time period</u>."

B.5 Inventory and Throughput Quantity Information

Report all quantities in pounds. The unit of measurement for these questions is "pounds" except for "dioxin and dioxin-like compounds" where the unit of measurement is "grams." Do not use the USEPA Form R range quantity or range code – you must provide an estimated quantity. Do not report fractions of a pound unless the substance is a PBT; do round quantities up or down to the nearest pound. Do not use scientific notation! Do not include the units of measurement or other notations with the quantity, e.g. "M," "pounds," "lbs," "kg," etc. It is to your advantage to clearly note commas and decimal places, as appropriate, to clarify numerical entries for all questions.

For questions #4 through #22, report the data in estimated quantities of pounds for calendar year 2000. If a question does not apply to your operations, check the "N/A" column or box for "not applicable" or enter "N/A." Rounding off to two significant integers (as per Form R) is not recommended because of the impact on materials accounting calculations.

For each estimate, you are required to indicate the principal method used to determine the amount of substance reported. Circle the basis of estimate letter code that identifies the method that applies to the largest portion of the total estimated quantity.

For example, if 40 percent of stack air emissions of the reported substance was derived using monitoring data, 30 percent by mass balance, and 30 percent by emission factors, circle the code letter "M" for monitoring.

The basis of estimate codes are as follows:

- M Estimate is based on monitoring data or measurements for the substance; e.g. as released to the environment and/or transferred to an off-site facility; using invoice data or forms; or weighing substances in inventory.
- C Estimate is based on mass balance calculations, such as calculation of the amount of the substance in streams entering and leaving process equipment.
- E Estimate is based on published emission factors, such as those relating release quantity to throughput or equipment type (e.g. air emission factors).
- Estimate is based on other approaches such as engineering calculations (e.g. estimating volatilization using published mathematical formulas) or best engineering judgement.
 This would include applying an estimated removal efficiency to a waste stream, even if the composition of the stream before treatment was fully identified through monitoring data.

If the monitoring data, mass balance or emission factor used to estimate the release is not specific to the substance being reported, the form should identify the estimate as based on engineering calculations or best engineering judgement (i.e. "0" not "M").

If a mass balance calculation yields the flow rate of a waste stream, but the quantity of reported substance in the waste stream is based on solubility data, report "0" because "engineering calculations" were used as the basis of estimate of the quantity of the substance in the waste stream.

If the concentration of the substance in the waste stream was measured by monitoring equipment and the flow rate of the waste stream was determined by mass balance, then the primary basis of estimate is "monitoring" (M). Even though a mass balance calculation also contributed to the estimate, "monitoring" should be indicated because monitoring data were used to estimate the concentration of the waste stream.

Mass balance (C) should only be indicated if it is <u>directly</u> used to calculate the mass (weight) of the reported substance. Monitoring data should be indicated as the basis of estimate <u>only</u> if the chemical concentration is measured in the waste stream being released into the environment. Monitoring data should <u>not</u> be indicated, for example, if the monitoring data relates to a concentration of the substance in other process streams within the facility.

4. Maximum Daily Inventory of Substance - For the reported substance, estimate in pounds the greatest amount that was present at your facility on any single day during 2000. If the substance is part of a mixture, include the quantity of the substance contained in the mixture, not the total quantity of the mixture itself. (This reported quantity should be covered by the two-digit range code entered on Form R, Part II, Section 4.1.)

EXAMPLE: At one time during <u>2000</u>, your facility stored a maximum of 10,000 pounds of a mixture containing 10% by weight of 1,1,1-trichloroethane. Therefore, 1,000 pounds of 1,1,1-trichloroethane were on site. Your answer to question 4 would be <u>1,000</u> pounds, not 10,000 pounds.

- 5. Starting Inventory of Substance Provide the total quantity of the substance already on site as of January 1, 2000 (or as close as possible to that date). The total quantity is to include, but not be limited to, the amount of the substance on site as raw material, as a mixture, as (or in) product, as (or in) intermediates, etc., and as (or in) waste that was generated in the prior year and was still on site at the beginning of the year.
- 5.1 Quantity of Beginning Inventory that is Nonproduct Output (NPO) Report the total quantity of the substance on site at the beginning of calendar year 2000 that is nonproduct output. (See question #11 for the definition of NPO.)
- 6. Quantity Produced on Site Report the total quantity of the substance produced on site during calendar year 2000. The total quantity should include, but not be limited to, both intentional and unintentional syntheses in a production process, isolated intermediates, and quantities generated as NPO (waste), by-products, or impurities. The quantity produced as a transient intermediate, intentional or unintentional, is to be included.

In the case of metals and metal compounds, we need to understand the distinction between the activity definition for "manufacture" and the materials accounting data element of "produced" (see Section B, questions #2.1 vs. #6). Only "aluminum (fume or dust)" and "zinc (fume or dust)" may be reported as produced on site. These two forms of the two metals may be produced from metal ingots, chips, solutions, etc. and, therefore, be reported under this question. Otherwise, in a process, a metal compound may be "manufactured" from either the parent metal or a metal compound. If a metal undergoes a change of valence, a metal compound is considered to be "manufactured." For example, during the combustion process copper in valence state zero changes to copper in valence state +2 in a compound such as copper (II) oxide (CuO). Furthermore, a metallic compound could be transformed to another metallic compound without a change in valency (e.g., copper (II) chloride (CuCl₂) is transformed to copper (II) oxide). The transformation to a new compound without a change in valence state is also considered to be "manufactured" for purposes of this reporting requirement. Any metal or metal compound used to "manufacture" another metal compound is reported as "quantity brought on site" (question #7) and the parent metal only is quantified. In the case of a metal or metal compound used to "manufacture" another metal compound, you check 2.1a and 2.1c through 2.1f, and then any of 2.2 and/or 2.3, as appropriate, for the purposes of question #2.

- 7. Quantity Brought on Site Report the total quantity of the substance brought into the facility from all off-site suppliers, including other facility locations and divisions of your own company, during calendar year 2000. The total quantity should include, but not be limited to, substances used as a raw material, a chemical processing aid, a manufacturing aid, or an ancillary material; quantities brought on site and repackaged; quantities brought on site as mixtures; quantities brought on site as recycled substance; and quantities brought on site as (or in) waste.
- 7.1 Quantity of #7 that is Brought on Site as Recycled Substance Report the total quantity of the substance brought into the facility as recycled substance from all off-site suppliers, including other facility locations and divisions of your own company, during calendar year 2000.
- 8. Quantity Consumed on Site Report the total quantity of the substance consumed in production processes during the reporting year. A substance is consumed if its molecular structure is altered, i.e. the substance is reacted and no longer exists in its original chemical form. Quantities of the substance used in a production process that are not chemically reacted are not to be included here.

NOTE: When reporting a metal, whether as the element or as a component of a metal compound (category), the metal should not be reported as "consumed on site" (unless aluminum or zinc in a dust form, i.e. powder, is processed or otherwise used). The mass of the parent metal can not be chemically altered. Metals usually occur in the form of compounds that must be physically or chemically processed to yield the pure metal. The metal may change valence states, the compound in which the metal is contained may be consumed, a new metal compound may be formulated, but the metal itself is not consumed. Remember, when reporting metals as a component of a compound, only the amount of the parent metal is quantified in each appropriate reporting field.

Example #1: A facility manufactured nitrobenzene by nitrating benzene with a nitric acid-sulfuric acid mixture. Benzene was "consumed" in the production process because it experienced a chemical change and ceased to exist as benzene.

On the other hand, quantities of selected substances that are incorporated in a process but <u>not</u> chemically transformed should not be listed as "consumed."

Example #2: A facility used trichloroethylene (TCE) as a degreasing agent for cleaning metal. Some of the substance evaporated from the process, and the rest became too contaminated for reuse. The quantities are entered as "Air Emissions" (#15 and/or #16) and "Transfers to Other Off-Site Locations" (#21), respectively, not under "Quantity Consumed" (#8).

Example #3: An electroplating facility used metal cyanide compounds in their electroplating operations. More than 25,000 pounds of the metal cyanide compound were processed. The parent metal from the metal cyanide compound was plated onto a substrate electrochemically, leaving the cyanide as a waste product. The parent metal was "processed" while the cyanide compound was "otherwise used." The quantities of the parent metal, reported as "metal compound," are reported as "shipped off site as (or in) product" (#9), "ending inventory" (#10), if appropriate, and any applicable environmental releases, on-site management practices, or off-site transfers. The quantities of the "cyanide compound" are reported as "ending inventory" (#10), if appropriate, "Transfers to Other Off-Site Locations" (#21) and any other appropriate activities.

- 9. Quantity Shipped off Site as (or in) Product Report the total quantity of the substance shipped off the facility site during calendar year 2000 in a form suitable for final use, as intermediates subject to further processing leading to final use, or even shipped in its "raw" form as found in inventory. Include quantities shipped to other facility locations and divisions of your own company. Also include quantities shipped to locations such as off-site warehouses, vendors, etc. Again, enter the quantity of the substance only, not the total quantity of the mixture within which it is a component. Do not include quantities being shipped off site for recycling, energy recovery, waste treatment, or disposal under this question. These should be reported under question #21. Quantities of the substance that were chemically altered or reacted during processing should be reported under question #8 and not here.
- 10. Ending Inventory Report the total quantity of the substance remaining on site at the end of calendar year 2000. The total quantity is to include, but not be limited to, the amount of the substance on site as raw material, as a mixture, as (or in) product, as (or in) intermediates, etc., and as (or in) waste that was generated and was still on site at the end of the year.
- 10.1 Quantity of Ending Inventory that is Nonproduct Output (NPO) Report the total quantity of the substance remaining on site at the end of calendar year 2000 that is nonproduct output. (See next question, #11, for definition of NPO.)

- 11. Total Nonproduct Output (NPO) The numerical value inserted must equal the total of all waste streams generated. This number should be consistent with the data in your Pollution Prevention Plan. NPO must be calculated using the following equation:
 - NPO = (12) Quantity Recycled Out-of-Process on Site and Used on Site + (13) Quantity Destroyed through On-Site Treatment + (14) Quantity Destroyed through On-Site Energy Recovery + (15) Stack Emissions + (16) Fugitive Emissions + (17) Total Discharge to POTW + (18) Total Discharge to Surface Waters + (19) Total Discharge to Groundwater + (20) On-Site Land Disposal + (21) Transfers to Other Off-Site Locations + (10.1) Quantity of Ending Inventory that is NPO (5.1) Quantity of Beginning Inventory that is NPO
- 12. Quantity Recycled Out-of-Process on Site and Used on Site List the quantity of the substance that was recycled out-of-process on site and then processed or otherwise used again at the facility during calendar year 2000. (DO NOT include recycling that occurs in-process!) This question refers to the process of minimizing the amount of waste to be otherwise managed or disposed by reclaiming reusable materials by the removal of contaminants from the substance to allow it to be used again. Quantities recycled but not used again on site should be reported as one, or more, of the following: 1) an environmental release; 2) an off-site transfer; 3) a product (as co-product) shipped off site; 4) other on-site waste management activity or 5) part of the year end inventory.
- 13. Quantity Destroyed through On-Site Treatment Report the total quantity of the substance that was destroyed or neutralized through on-site treatment processes. The total quantity is to include, but not be limited to, that which was destroyed in all waste streams at the facility, i.e. gaseous, wastewater (aqueous), liquid (non-aqueous), and solid waste streams. For the purposes of this question, destroyed includes any method, technique or process, designed to change the physical, chemical, or biological character or composition of the substance so as to neutralize such wastes, or to chemically decompose the waste. (The quantity should be the same as entered on Form R, Part II, Section 8.6, Column B.)
- 14. Quantity Destroyed through On-Site Energy Recovery Report the total quantity of the substance that was destroyed through an on-site energy recovery process. For the purposes of reporting on the RPPR, reportable on-site energy recovery is the combustion of a residual material containing a reported substance as nonproduct output when: a) the combustion unit is integrated into an energy recovery system (i.e. boilers, industrial furnaces, and industrial kilns); and b) the substance is combustible and has a heating value high enough to sustain combustion. Note: metals and metal compounds are not combustible and, therefore, can not be reported as destroyed through on-site (or off-site) energy recovery. (The quantity should be the same as entered on Form R, Part II, Section 8.2, Column B.)

B.6 Environmental Releases and Off-Site Transfers

Both routine releases, such as stack air emissions, and accidental or non-routine releases, such as chemical spills or wastes generated from clean-up operations on site, must be included in the following questions (#15 through #21). Attach any explanatory notes, itemized sources of releases, transfers, calculations, etc. that are believed necessary to clarify any entries on this report.

Air Emissions

- 15. Stack Emissions These are emissions that were released into the atmosphere from a readily-identifiable point source. This definition is intended to include emissions from stacks, exhaust vents, ducts, pipes, or other confined air streams, and storage tanks. (The quantity should be the same as entered on Form R, Part II, Section 5.2.)
- 16. Fugitive Emissions These are emissions that were not released through stacks, vents, ducts, pipes or any other confined air stream. Included are emissions, evaporation, leakage, or releases from the following sources: blending operations; transfer operations; charging and discharging reaction vessels; storage piles; leaking seals, pumps, flanges, valves, etc.; furnaces or kilns; open vats or pits; crushing, pelletizing or grinding operations; and, loading and unloading operations. (The quantity should be the same as entered on Form R, Part II, Section 5.1.)

Wastewater Discharges

Questions #17 through #19 are concerned with wastewater discharges to publicly owned treatment works (POTW's), to surface waters, and to groundwaters. These questions are only concerned with the quantity of the reported substance that was discharged, not with the volume of the effluent that contained the substance. Thus, if you discharged a million gallons of effluent containing 500 pounds of the reported substance, you enter "500."

- 17. Total Discharge to Publicly Owned Treatment Works (POTW) Enter the total quantity of the substance discharged into a municipal sewer system or one owned by a municipal utilities authority, sewerage authority, or regional utilities authority. (The quantity should be the same as entered on Form R, Part II, Section 6.1.)
- 18. Total Discharge to Surface Waters Enter the total quantity of the substance discharged directly into surface waters, other than quantities which went to surface waters via a POTW (#17). (The quantity should be the same as entered on Form R, Part II, Section 5.3.)
- 19. Total Discharge to Groundwater Enter the total quantity of the substance discharged into groundwater from the facility. Discharges onto land, such as spray irrigation, discharges to infiltration basins, and discharges to subsurface systems should be reported under this question as groundwater discharges.

On-Site Land Disposal

20. On-Site Land Disposal - On-site land disposal includes, but is not limited to: 1) surface impoundments; 2) on-site landfills; and 3) land treatment (land spreading), including other activities, such as incorporating wastes into soil for treatment within the boundaries of the reporting facility. While item "3" is considered a release to land, any volatilization of a reported substance into the air occurring during the disposal operation must be included in the total fugitive air emissions reported in question #16. Question #20 is organized in tabular form. This question provides space for three (3) separate entries if different management or disposal methods were applicable to quantities of the reported substance. (See Table 3 on page 20 for a

complete listing of applicable management method codes.)

In the first column, enter the appropriate code or codes from Table 2 (page 20) for the on-site storage method prior to land disposal within the boundaries of the reporting facility. If code SM-09 is reported, be sure to also provide a description of the storage method.

In the second column, enter the total quantity (in pounds) of NPO (or waste material) disposed on site that contained the reported substance.

In the third column, enter the quantity (in pounds) of the reported substance contained in the disposed NPO. (The sum of the quantities entered here should be the same as the sum of the quantities as entered on Form R, Part II, Section 5.5.1 through 5.5.4.)

In the fourth column, circle the appropriate basis of estimate for the quantity of the reported substance that was disposed (or managed) on site.

In the fifth column, list the appropriate management or disposal method code or codes from Table 3 (page 20) to indicate the method or methods by which the reported substance was managed or disposed on site.

Other Off-Site Transfers

21. Transfers to Other Off-Site Locations - In this section provide information as to how NPO containing the reported substance was managed or disposed at other off-site locations. Off-site transfers include transfers to other locations for recycling, energy recovery, treatment, or disposal. Question #21 is organized in tabular form. This question provides space for six (6) separate off-site locations. Each off-site location provides space for three (3) entries if different management or disposal methods were applicable to quantities of the reported substance transferred to the identified location. *Do not report POTW discharges here!!*

In the first column, list the name and physical location, including the street, city, state and zip code <u>and</u> the USEPA ID#, if appropriate, of each final disposal site or off-site management facility to which NPO containing the reported substance was sent, directly or through a hauler. <u>NOTE</u>: do not list a transfer facility or brokerage facility as the final treatment or disposal facility, unless the final disposal site is not known.

In the second column, enter the appropriate code or codes from Table 2 (page 20) for the on-site storage method. (This entry should represent the method by which the selected substance was stored on site as NPO prior to the off-site transfer.) If code SM-09 is reported, be sure to also provide a description of the storage method.

In the third column, enter the total quantity (in pounds) of transferred NPO (or waste material) that contained the reported substance.

In the fourth column, enter the quantity (in pounds) of the reported substance contained in the transferred NPO. (The quantities entered here should be the same as entered on Form R, Part II, Section 6.2.)

In the fifth column, circle the appropriate basis of estimate for the quantity of the reported substance that was transferred off site.

In the sixth column, list the appropriate management or disposal method code or codes from Table 3 (page 20) to indicate the method or methods by which the reported substance was managed or disposed off site.

Table 2: Nonproduct Output (NPO) Storage Method

SM-01 Drums	SM-04 Drying Bed	SM-07 Carboy
SM-02 Bulk Tanks	SM-05 Lagoon (lined)	SM-08 Rail car
SM-03 Dumpster	SM-06 Lagoon (unlined)	SM-09 Other (specify)

	Table 3: Nonproduct Output (NPO) Management Method			
Recycl	ina	Dispos	sal	
D20	Solvents/Organics Recovery	D10	Storage Only	
D24	Metals Recovery	D41	Solidification/Stabilization - metals &	
D26	Other Reuse or Recovery		metal compounds only	
D28	Acid Regeneration	D62	Wastewater Treatment (excluding	
D93	Transfer to Waste Broker - Recycling		POTW) for metals & metal compounds	
	• •	D71	Underground Injection	
		D72	Landfill/Disposal Surface Impoundment	
Waste	<u>Treatment</u>	D73	Land Treatment	
D40	Solidification/Stabilization	D79	Other Land Disposal	
D50	Incineration/Thermal Treatment	D90	Other Off-Site Management	
D54	Incineration/Insignificant Fuel Value	D94	Transfer to Waste Broker - Disposal	
D61	Wastewater Treatment (excluding POTW)	D99	Unknown	
D69	Other Waste Treatment			
D95	Transfer to Waste Broker	Energy	/ Recovery	
	- Waste Treatment	D56	Energy Recovery	
		D92	Transfer to Waste Broker	
			- Energy Recovery	

B.7 Self Verification of Materials Accounting Statement

The sum of the reported starting inventory, quantity produced on site, and quantity brought on site should approximately equal the sum of the reported quantity consumed (i.e. chemically reacted), quantity shipped off site as (or in) product, quantity shipped off site as (or in) NPO, quantity destroyed through on-site treatment, quantity destroyed through on-site energy recovery, total air emissions, total wastewater discharges, on-site land disposals, and ending inventory. (See the self verification worksheet on page 21 of the instructions.)

- Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes In this section, enter the total quantity (in pounds) of the reported substance released directly into the environment or sent off site for recycling, energy recovery, treatment, or disposal during the reporting year (2000) due to any of the following events:
 - (1) remedial actions;
 - (2) catastrophic events such as earthquakes, fires, or floods; or
 - (3) one-time events not associated with normal or routine production processes.

(The quantity entered here should be the same as entered on Form R, Part II, Section 8.8, and the quantity should be included in the appropriate media field(s) as well. For example, there was a spill of 100 pounds onto soil. It was estimated that 90% evaporated and 10% remained in the soil. You would include 90 pounds in the fugitive air emissions category, #16, and 10 pounds in the on-site land release category, #20, along with all other estimated quantities for these two categories.)

2000 Release and Pollution Prevention Report Self Verification of Materials Accounting Data Worksheet

(All Quantities Must Be Reported In Pounds except for Dioxin and Dioxin-Like Compounds Reported in Grams)

FAC_ID:	_ CAS#:	Substance:	
<u>Inputs</u>		<u>Outputs</u>	
5. Starting Inventory		8. Quantity Consumed (chemically altered)	
6. Quantity Produced On Site		9. Quantity Shipped Off Site as (or in) Product	
7. Quantity Brought On Site		10. Ending Inventory	
12. Quantity Recycled Out-of Process & Re-Used on Site		12. Quantity Recycled Out-of Process & Re-Used on Site	
Re-Osed on Site		13. Quantity Destroyed through On-Site Treatment	
		14. Quantity Destroyed through On-Site Energy Recovery	
		15. Stack Air Emissions	
		16. Fugitive Air Emissions	
		17. Discharge to POTWs	
		18. Discharge to Surface Waters	
		19. Discharge to Groundwaters	
		20. On-Site Land Disposal	
		21. Other Off-Site Transfers	
Sum of Inputs:	»	Sum of Outputs:	
(Fo	or your recors only! Do N	IOT submit worksheets with your RPRR!)	

- 23. 2000 Quantity and Units of Production Associated with the Substance Report the total quantity, units, and product description for the product(s) manufactured at the facility in which the reported substance was involved in the production process. The units should be the same units of production already identified in your Pollution Prevention Plan. Do not use values of sales to measure the quantity of production. Space is provided to report four (4) products for the current year. List up to six (6) additional products associated with the substance using a separate sheet, if necessary.
- 24. Has any reduction or elimination of either the use of the reported substance or the generation of the reported substance as nonproduct output (NPO) occurred during 2000 due to discontinuance of operations? - If any reductions in the use of the substance or the generation of the substance as NPO occurred during the reporting year, relative to the quantities for the previous year, due to the discontinuance of operations, including operations transferred to or undertaken by another facility, report the quantity reduced.

B.8 Pollution Prevention Activities

25. Has any material-related change (change in the amount of the reported substance used due to substitution of a non-listed substance) been employed to reduce the quantity of this reported substance during 2000 relative to 1999 levels? - Answer this question "Yes" or "No." If the answer is "Yes," report the quantity of the reported substance that has been reduced in use at your facility in the current year (2000) relative to the previous year (1999) levels due to substitution of another substance that is <u>not</u> on the list of reportable substances. Circle the basis of estimate for the quantity reported. Indicate the CAS number, the name, and the quantity of the substance that was used as a substitute. PLEASE NOTE: Question #25 focuses only on reduction in the use of the reported substance.

EXAMPLE: Your facility reduced the processing of benzene by substituting tetrahydrofuran. Only 30,000 pounds of benzene were processed in the current year as compared to 40,000 pounds of benzene processed in the previous year. This material substitution required that 8,000 pounds of tetrahydrofuran be processed in the current year. Therefore, under "Quantity of Substance Reduced (pounds) (previous to current year)," you would report 10,000 pounds (40,000 pounds - 30,000 pounds). You would also indicate the basis of estimate for the quantity reported (M,C,E,O). In addition, provide the CAS number, name and quantity of the substituted substance (i.e. tetrahydrofuran). Enter the following information for benzene substitution:

	CAS NUMBER	SUBSTANCE	QUANTITY (pounds)
a)	109-99-9	Tetrahydrofuran	8,000

NOTE: IF YOU ARE A FIRST-TIME SUBMITTER OF SECTIONS A AND B, STOP HERE! YOU ARE NOT REQUIRED TO SUBMIT A POLLUTION PREVENTION PROGRESS REPORT OPTION 1 OR OPTION 2 AS DESCRIBED BELOW.

III. REQUIREMENTS TO SUBMIT A POLLUTION PREVENTION PROGRESS REPORT

Facilities with Base Year 1995 and 2000 (those in SIC 20, 21, 22, 23, 24, 25, 27, 29, 31, 32, 35, 36, 37, 38 and 39):

Your facility must submit your Section C and D of this report based on 1995's plans or submit P2-115 worksheets as an option. In the meantime, your facility must prepare your Pollution Prevention Plans and submit a Pollution Prevention Plan Summary by July 1, 2001.

Facilities with Base Year 1999 (SIC 4911, 4931, 4939, 4953, 5169 and 5171):

Pollution Prevention Plans were to be prepared and Plan Summaries were to be submitted by July 1, 2000.

Facilities with Base Year 1998 (SIC 26, 28, 30, 33 and 34):

Pollution Prevention Plans were to be prepared and Plan Summaries were to be submitted by July 1, 1999.

NOTE TO ALL FACILITIES THAT MUST SUBMIT A POLLUTION PREVENTION PROGRESS REPORT FOR 2000: THERE ARE NOW TWO OPTIONS

The re-adopted Pollution Prevention Program rules, effective March 2000, include two progress reporting options. Both options are intended to provide information about progress that your facility has made toward the pollution prevention goals that were established in your Pollution Prevention Plan and reported to the Department in your Pollution Prevention Plan Summary.

OPTION 1 Instructions – pages 23 - 26

OPTION 2 Instructions – pages 27 - 33

A PROGRESS REPORTING OPTION 1

- Submission of the Pollution Prevention Process Level Data Worksheet (P2-115)

The Pollution Prevention Process Level Data Worksheet(s) (P2-115) may be submitted in lieu of Sections C and D of the RPPR to fulfill the Pollution Prevention Plan Progress Report requirement.

NOTE: As now required in the new rule (N.J.A.C. 7:1K-4.9), the Pollution Prevention Process Level Data Worksheet (P2-115) <u>must</u> first be prepared and included in the Pollution Prevention Plan that remains on site. One worksheet must be completed for each hazardous substance in each process. Multiple worksheets are therefore required to be in the Plan, except for the simplest case of only one substance in one process at the facility.

A.1 Basic Requirements

- The facility only needs to provide basic data on the worksheet(s). The Department will complete the calculations for NPO and USE per unit of product, production index, and pollution prevention reductions, and provide the results to the facility. Note that the data required on the worksheet is not new and have always been required to be in your P2 Plan in order to complete Sections C and D of the RPPR.
- The data for the base year is entered in the Base Year column. The P2-115(s) with base year data may be submitted with the Plan Summary (N.J.A.C. 7:1K-5.2). Alternately, the base year data may be submitted along with the data for Year 1.

- The data for each of the subsequent years of the five-year planning cycle is to be entered in the appropriate columns on the Pollution Prevention Process Level Data Worksheet. Once entered, the P2-115 must be included in the Pollution Prevention Plan on site. When using Option 1, the sheet must be copied and sent to the Department as part of your RPPR submittal.
- The Pollution Prevention Process Level Data Worksheet is to be submitted for each process and substance regardless of whether they are targeted or non-targeted.
- The Pollution Prevention Process Level Data Worksheet for any substance in any process is to be updated by the date of the next annual submittal as a result of any of the modifications identified in the rule (See N.J.A.C. 7:1K-3.9 through 3.13).
- For consistency and continuity of tracking, it is recommended that a facility that selects the P2-115 option continue to use this option in subsequent years of the five-year planning cycle, and not revert to Option 2. For these same reasons, it is also required that a facility uses this option for all substances and processes in a given year.
- The P2-115 must <u>not</u> be used to enter estimates for upcoming years. Only actual current data should be submitted.

A.2 How to Complete a P2-115 Worksheet

(See the "Example of Optional P2-115 Submittal for a Substance in a Process" on Page 26.)

(Some information is pre-printed on the RPPR by the DEP. Refer to Section A for the details on the Mailing Address and Facility Location.)

Base Year Enter the calendar year as defined by SIC code coverage for Pollution Prevention

reporting on page 23. This is the year upon which the Plan is based. In the

example on page 26, the Base Year is 1999.

Mailing Address Enter facility mailing address, facility contact and telephone number in block on

left.

Facility Location Enter facility location in block on right.

Process Level Information

Use one sheet for each hazardous substance in each process.

Process I.D. Enter the process identification code identified in your Pollution Prevention Plan

and in the Pollution Prevention Plan Summary. This ID must be the same as the one found in Section C question #1 of your Pollution Prevention Plan Summary. In

this example, "widget line" was our Process I.D.

Units of Production Enter the unit of production identified in your Pollution Prevention Plan and in the

Pollution Prevention Plan Summary, e.g. type of widget, lbs. of chemical, ft² of product etc. For this example, unit of production would be "widgets

manufactured."

Is process targeted? Indicate whether or not process is targeted for pollution prevention options.

Is this a grouped process?

Indicate whether more than one process is grouped for combined reporting.

Hazardous Substance:

Enter the name of the hazardous substance in this process. In this case

the process involves "toluene."

CAS No. Enter the Chemical Abstract Services (CAS) registry number for the chemical. In

this case the CAS number for toluene is 108-88-3.

Production quantity Enter quantity produced in the unit of "widget," "lbs.," or "ft²," etc. The units must

be consistent with "UNITS OF PRODUCTION" identified above. In this example, 4,682,005 is entered under "Base Year" to refer to the number of widgets produced in Base Year 1999. Under "Year 1" this quantity increases to 4,820,320.

USE Enter the sum of quantity of hazardous substance consumed, shipped off-site as

(or in) a product, and generated as nonproduct output (NPO). In this example, under "Base Year" 50,100 pounds of toluene is entered for USE. Under "Year 1"

50,410 is entered for USE.

NPO Enter the sum of all the components listed below the "NPO" in this field. Different

types of NPO exist at a facility, all of which are listed on the P2-115. The 11 rows below the "NPO" row are the components of NPO. Refer to Section B for their definitions and only enter the quantity associated with this process to each question. The NPO is also 50,100 since all of the use falls into the "otherwise use" category. The various components of Base Year NPO applicable to this example are 49,100 (Destroyed: On-site treatment), 505 (Stack air emissions) and 495 (Fugitive emissions). Under "Year 1" 50,410 is entered for NPO, 49,400 pounds are destroyed, 555 pounds are emitted as stack emissions, and 455

pounds as fugitive emissions.

Four specific questions (also found in Section C and D of the RPPR) pertain to years 1 through 5, if applicable. Entries would not be made in Base Year. These questions are as follows:

P2 techniques used in given year (implemented): Enter codes for P2 techniques beginning in the Year 1 column. In this case, for example, you might enter "W59," Modified stripping/cleaning equipment, and "W61," Changed to aqueous cleaners. (See codes in these RPPR Instructions, Appendix F.)

Was this process discontinued or sent off site in given year? Enter "Y" or "N" depending upon whether or not such changes occurred.

Did facility make process change(s) that triggered Plan modification? Enter "Y" or "N" depending upon whether or not such changes occurred.

Was facility's P2 progress (targeted process only) less than anticipated? Enter "Y" or "N" as appropriate. If "Y" is entered, explain on a separate attachment.

CERTIFICATION OF OWNER AND OPERATOR: The certification must be signed and dated with the phone number and title information completed. The certification is required on only one P2-115 form if more than one is submitted.

POLLUTION PREVENTION PROCESS LEVEL DATA WORKSHEET (P2-115)

NOTE: THIS WORKSHEET IS <u>REQUIRED</u> AS PART OF THE POLLUTION PREVENTION PLAN, AND IS OPTIONAL AS A SUBMITTAL IN LIEU OF SECTIONS C AND D OF THE RELEASE AND POLLUTION PREVENTION REPORT. ALL OPTIONAL SUBMITTALS ARE NOT CONFIDENTIAL.

	Base Ye	ear <u>1999</u>	<u></u>			
Please type this form 12345600000 ACME MANUFACTURING PO BOX 12345 ANYWHERE, NJ 90210	12345600000 ACME MANUFACTURING PO BOX 12345 ANYWHERE, NJ 90210				0231	
MAILING ADDRESS INFORMA	TION	BACILI	TY LOCATI	ON INFOR	MATION	_
PROCESS LEVEL INFORMATION:	(Use one sheet	for each hazard	dous substance	at each proces	s.)	
Process ID: Up to twelve characte	ers or digits may	y be used	Widg	et Line 		
Hazardous Substance: Toluene		C	AS No. 1	08-88-3		
Units of Production (e.g. type of widg	get, lbs. of chem	nical, ft ² of pro	duct)	widge	ets manufac	tured
Is process targeted? (Y/N) Y	_ Is thi	is a groupe	d process?	(Y/N) <u>Y</u>		
	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Production quantity (widget, lbs, ft ² , etc.,)	4,682,005	4,820,320	10002	10010	10	10000
USE (pounds)	50,100	50,410				
Consumed	0	0				
Shipped off-site as (or in) product	0	0				
NPO (pounds)	50,100	50,410				
Recycled out of process	0	0				
Destroyed: On-site treatment	49,100	49,400				
Destroyed: On-site energy recovery	0	0				
Stack air emissions	505	555				
Fugitive air emissions	495	455				
Discharge to POTWs	0	0				
Discharge to groundwater	0	0				
Discharge to surface waters	0	0				
On site land disposal	0	0				
Transferred off site	0	0				
End. Inv. as NPO – Beg. Inv. as NPO	0	0				
P2 techniques used in given year (see code in Appendix F)		W59, W61				
Was this process discontinued or sent off site in given year? (Y/N)		N				
Did facility make process change(s) that triggered Plan modification? (Y/N)		N				
Was facility's P2 progress (targeted process only) less than anticipated? (Y/N) (Attach explanation.)		N				
CERTIFICATION OF OWNER OR OPERATO information submitted on this worksheet is true, according to the control of					nder penalty of	law that the
Signature: John Doe	Date: _	6/30/01	_ Phone No:	(609) 12	23 – 4567	
Name (print) John Doe	Title: _	Pres	sident			_

B. PROGRESS REPORTING OPTION 2

- Submission of Sections C and D of the RPPR

Even if you choose not to submit P2-115 Worksheet(s), the P2-115 Worksheet(s) must still be completed and be in your Pollution Prevention Plan.

Sections C and D include information about progress that your facility has made toward the pollution prevention goals that were established in your Pollution Prevention Plan and reported to the DEP in your Pollution Prevention Plan Summary. To complete Sections C and D, refer to your Pollution Prevention Plan and your Pollution Prevention Plan Summary (DEP-113) that list your facility-level and process-level pollution prevention goals.

The instructions on the following pages pertain only to Reporting Option 2 – Sections C and D of the Release and Pollution Prevention Report (RPPR or DEQ-114).

B.1 SECTION C. FACILITY-LEVEL SUBSTANCE-SPECIFIC POLLUTION PREVENTION PROGRESS

PHOTOCOPY AND COMPLETE ONE SECTION C FOR EACH SUBSTANCE REPORTED IN SECTION B OF THIS RELEASE AND POLLUTION PREVENTION REPORT.

- 1.1 CAS Number (Category Number) Report the Chemical Abstracts Service (CAS) registry number for the substance being reported. Use the CAS numbers and chemical category codes provided in Appendices B and C.
- 1.2 Substance Name (Category Name) Enter the name of the substance being reported. Refer to Appendices B and C for the list of reportable substances.
- Production Ratio or Activity Index -The production ratio or activity index is a ratio of Current Year total use, in terms of the base year production efficiency, to the Base Year total use of the substance. The production ratio normalizes the variation in units produced from one year to the next.

Calculations must be included in your Pollution Prevention Plan and the results of the calculations must be submitted on the reporting form. Even if your facility has implemented no options or has set zero goals, calculations for all chemicals must be performed annually to determine progress on USE and NPO, and must be included in your Plan.

The most accurate way to report this progress for pollution prevention planning is by using process-level, substance-specific data (substance use per unit of product and nonproduct output per unit of product). Choosing an appropriate unit of product in your Plan is critical to developing a useful production ratio or activity index. (See Section D, questions 3.1 and 3.2, of these instructions.) You should have already collected this information for all of your production processes and incorporated it into your Pollution Prevention Plan (see N.J.A.C. 7:1K-4.3(b)3ii and 4.3(b)4).

The example below illustrates the use of process level data to develop facility level progress.

EXAMPLE: Assume that a facility produces products X, Y, and Z from processes A, B, and C, respectively, which all use xylene. In the Base Year, the production of one unit of product X requires 100 pounds of xylene, the production of one unit of product Y requires 18 pounds of xylene, and the production of one unit of product Z requires 10 pounds of xylene. Suppose that in the Base Year, the facility produced 1000 units of product X, 1000 units of product Y and 1000 units of product Z. The facility-wide total use of xylene would be as follows:

Base Year

		# of Units of	Use of xylene per	Total USE
Process	Product	Product	Unit of Product	(pounds)
Α	X	1,000	100	100,000
В	Υ	1,000	18	18,000
С	Z	1,000	10	10,000
Facility-wide Total:		3,000		128,000

In the Current Year, it doubled production of product X, held production of product Y constant and halved production of product Z. However, because the facility initiated some kind of pollution prevention method, its production efficiencies changed. Now to produce one unit of product X requires 50 pounds of xylene, to produce one unit of product Y requires 8 pounds of xylene, and to produce one unit of product Z requires 5 pounds of xylene. The Current Year facility-wide total use of xylene is now as follows:

Current Year

		# of Units of	Use of xylene per	Total USE
Process	Product	Product	Units of Product	(Pounds)
Α	X	2,000	50	100,000
В	Υ	1,000	8	8,000
С	Z	500	5	2,500
Facility-wide Total:		3,500		110,500

The production ratio for this facility in Year 1 is <u>not</u> the ratio of the Current Year to base year <u>total</u> use (110,500/128,000=0.86). It is also <u>not</u> the ratio of total units of product in the Current Year (3,500) to total units of product in the Base Year (3,000). Instead, the production ratio is the ratio of Current Year total use <u>in terms of the base year production efficiency</u> to the base year total use. Therefore, to calculate the Current Year's total use in terms of base year production efficiency, one has to use the production efficiencies from the Base Year as follows:

Current Year Total USE Based on Base Year Production Efficiency

		From Current Year	From Base Year	
		# of Units of	Use of xylene per	Total USE
Process	Product	Product	Units of Product	(Pounds)
Α	X	2,000	100	200,000
В	Υ	1,000	18	18,000
С	Z	500	10	5,000
Facility-wide Total:		3,500		123,000

The production ratio is then the ratio of current year facility-wide total use (based on the base year production efficiency) to base year facility-wide total use.

[(223,000/128,000) = 1.74]

Developing a weighted production ratio in this manner will enable the facility to fully demonstrate its progress in pollution prevention.

<u>NOTE:</u> It is possible that the production ratio you calculate for this report may not be identical to the production index that you report on the Form R pursuant to Section 313 of the federal Emergency Planning and Community Right to Know Act of 1986 (EPCRA). Under EPCRA, facilities are required to account for the total use, manufacture and processing of all listed substances for the entire facility, including pilot plants and treatment systems. *Under the NJ Pollution Prevention Act, pilot plants and treatment systems are excluded from pollution prevention planning and reporting.* As such, you may report two different production ratios, one on the Form R and a different one on this RPPR.

3. Percent Change for USE and NPO - Calculate the percent change (reduction, increase or no change) in total facility-wide use and total facility-wide nonproduct output (NPO) generated for each substance from the Base Year to this reporting year (Current Year).

Determine your Base Year as defined by SIC codes in the listings on page 23.

Calculate the percentage of changes as follows:

NOTE:

You can calculate the total facility-level use either from process level efficiency or from Section B of this report.

Base Year Facility-Level Use of Substance	
(from your P2-115 worksheet which is part of your Pollution Prevention Plan):	Α
Current Year Facility-Level Use of Substance:	
(from your P2-115 worksheet which is part of your Pollution Prevention Plan):	В
Base Year Facility-Level NPO for Substance:	
(from your P2-115 worksheet which is part of your Pollution Prevention Plan):	С
Current Year Facility Level NPO for Substance	
(from your P2-115 worksheet which is part of your Pollution Prevention Plan):	D
Production Ratio or Activity Index for Current Year:	
(Section C, question 2 on this report)	Е

The Percent Change for USE is calculated as follows:

Example of USE Percent Change:

From previous production ratio example, the company's total use of xylene in the Base Year was 128,000 pounds and 110,500 pounds in the Current Year based on the process-level use efficiencies. Their production index for Current Year is 1.74. The company's total use percent change due to pollution prevention activities compared to its Base Year is calculated as follows:

$$\frac{[(128,000 \times 1.74) - 110,500]}{128,000 \times 1.74} \times 100 = 50.39 \%$$

The company achieved total use reduction of 50.39% of xylene due to pollution prevention activities compared to its Base Year.

The Percent Change for NPO is calculated as follows:

$$[(C \times E) - D] \times 100 = ____%$$

Example of NPO Percent Change:

Tasty Flavors, Inc. had 12,000 pounds of NPO of toluene in the Base Year. In the current year, the company had 13,000 pounds of NPO of toluene. Their production index for current year was 1.2. The company's total NPO percent change due to pollution prevention activities compared to its Base Year is as follows:

$$\frac{[(12,000 \times 1.2) - 13,000]}{12,000 \times 1.2} \times 100 = 9.72 \%$$

Tasty Flavors, Inc. achieved a 9.72 % reduction in NPO generation of toluene due to pollution prevention measures.

- 4. If your facility discontinued or sent off site any production processes identified in your Pollution Prevention Plan and Plan Summary, note the process identification codes here. These process IDs should match those identified in your Pollution Prevention Plan and in Section C, question #1 of your Pollution Prevention Plan Summary. If any of these processes involved more than one reportable substance, indicate the process ID only once on a single Section C of this RPPR. You need not repeat these processes ID's on all of your Section Cs. If no processes were discontinued or sent off site last year, leave this question blank.
- 5. Certification of Owner or Operator Type, or print legibly, the full name and title of the company official with responsibility for facility management and who is authorized to certify, on behalf of the company, that all statements on Sections C and D are believed to be true, accurate and complete. This certification section must be signed and dated by the authorized official. A signature is required on one Section C only.

B.2 SECTION D - PROCESS-LEVEL POLLUTION PREVENTION INFORMATION FOR

TARGETED PROCESSES

PHOTOCOPY AND COMPLETE ONE SECTION D FOR EACH TARGETED PROCESS OR TARGETED GROUPED PROCESS IDENTIFIED IN YOUR POLLUTION PREVENTION PLAN AND POLLUTION PREVENTION PLAN SUMMARY. YOU MUST HAVE THE SAME NUMBER OF SECTION Ds IN THIS RELEASE AND POLLUTION PREVENTION REPORT AS THERE ARE SECTION Ds IN YOUR BASE YEAR POLLUTION PREVENTION PLAN SUMMARY.

- 1.1 Process ID Fill in the process identification code identified in your Pollution Prevention Plan and in the Base Year Pollution Prevention Plan Summary. This number should be identical to that found in Section C, question #1, of your Pollution Prevention Plan Summary.
- 1.2 Check here if your facility made a production process change last year that changes information contained in your Pollution Prevention Plan and Pollution Prevention Plan Summary. Any changes made by a facility last year as specified in N.J.A.C. 7:1K-3.9, 3.10. 3.11, 3.12 and 3.13 would require modifications to your Pollution Prevention Plan and Pollution Prevention Plan Summary.

If your facility made at least one of these changes as identified in the cited rule, you are required to modify your Pollution Prevention Plan and submit revised pages of the Pollution Prevention Plan Summary to the DEP with the submittal of this Release and Pollution Prevention Report. (See applicable requirements in N.J.A.C. 7:1K-3.9, 3.10. 3.11, 3.12 and 3.13.) If this applies to your facility, contact the Office of Pollution Prevention and Permit Coordination at (609) 777-0518 and you will be mailed the Pollution Prevention Plan Summary forms.

- 1.3 Check here if your facility's pollution prevention progress last year for any substance involved with this process was less than anticipated. If you checked this box, you are required to submit a statement with your Release and Pollution Prevention Report explaining why progress was less than anticipated. Attach this statement to your completed report, making sure it is clearly marked with your FACID, facility name and the process ID code.
- 1.4 Check here if this targeted production process used more than six reportable substances last year. If so, attach an additional Section D since each sheet has enough room to report on six substances only.
- 2.1 Substance Name or Category Name State the name of each substance or category name used in this targeted process. There is room on each Section D for six substances. Attach an additional Section D if a targeted process used more than six substances.
- 2.2 CAS Number (or Category Number) Report the Chemical Abstracts Service (CAS) number (or category number) for each substance used in this targeted production process. The CAS numbers and chemical categories are listed in Appendix B and C.

To answer questions 3.1 and 3.2, you will need to refer to the units of product, which you identified in your Pollution Prevention Plan.

Once your facility has determined the appropriate units of product in your Pollution Prevention Plan, the units <u>cannot</u> be changed in subsequent years, unless you modify your Pollution Prevention Plan, Pollution Prevention Plan Summary and previous Pollution Prevention Progress Reports.

3.1 Percent Change for USE - State the total progress your facility has made toward achieving each process-level pollution prevention goal for use identified in your Pollution Prevention Plan and in the Pollution Prevention Plan Summary submitted to DEP.

Calculate your facility's progress as follows:

Base Year Use of Substance Per Unit of Product (from your P2-115 worksheet which is part of your Pollution Prevention Plan):

Current Year Use of Substance Per Unit of Product
(from your P2-115 worksheet which is part of your Pollution Prevention Plan):

G

Percent Change for USE

EXAMPLE of USE Percent Change for Process:

In the Base Year, Zips Refrigerators, Inc. used 20 pounds of xylene in a production process to produce one refrigerator. In the Current Year, they used 17 pounds per refrigerator. The company's five year use reduction goal for xylene within this particular production process is <u>25</u>%. The company's pollution prevention percent change for the use of xylene within this process is as follows:

$$\frac{20 - 17}{20}$$
 x 100 = 15 %

Comparing the Base Year to the Current Year, Zips Refrigerators, Inc. achieved a 15% use reduction.

3.2 Percent Change for NPO - State the progress your facility has made toward achieving the process-level pollution prevention goals for NPO identified in the Pollution Prevention Plan and in the Pollution Prevention Plan Summary submitted to DEP.

Calculations must be included in your Pollution Prevention Plan and the results of the calculations must be submitted on the reporting form. Even if your facility has implemented no options or has set zero goals, calculations for all chemicals must be performed annually to determine progress on USE and NPO, and must be included in your Plan.

Calculate your facility's progress as follows:

Base Year NPO for Substance Per Unit of Product (from your Pollution Prevention Plan):

Н

Current Year NPO for Substance Per Unit of Product (from your Pollution Prevention Plan):

J

Percent Change for NPO

$$\frac{H - J}{H} \times 100 =$$
_____%

EXAMPLE of NPO Percent Change for Process:

In the Base Year, Zips Refrigerators, Inc. produced 3 pounds of xylene NPO in a process in the production of one refrigerator. In the Current Year, they produced 1.8 pounds of xylene NPO per refrigerator. The company's five year NPO reduction goal for xylene within the particular production process is 50%. The company's pollution prevention percent change for NPO of xylene within this production process is as follows:

$$\frac{3-1.8}{3}$$
 x 100 = 40 %

Comparing the Base Year to the Current Year, Zips Refrigerators, Inc. achieved a 40% NPO reduction.

- 4.1 Pollution Prevention Techniques Used in Current Year- For each substance used within the targeted production process, state the methods your facility used to achieve the use and/or NPO reductions in the current year (i.e. 2000). Use the three digit codes listed in Appendix F of the instructions. If your facility had no use or NPO reductions in the current year, leave this box blank.
- 4.2 Pollution Prevention Techniques Planned for Next Year For each substance used within the targeted production process, state the methods your facility *plans to implement next year (i.e. 2001)* to achieve the use or NPO reductions stated in Section D of your facility's Pollution Prevention Plan Summary. Use the three digit codes listed in Appendix F of the instructions. If your facility stated a reduction goal of zero for any substance, leave this box blank.

IV. FILING THIS REPORT

Make at least two (2) copies of the completed Release and Pollution Prevention Report (RPPR), including any pages and attachments on which additional information is reported.

1. You are required to return the <u>completed original</u> RPPR to the DEP at the address below. Be sure to include documentation for any trade secret claims on the Trade Secret Claim Form (DEQ-119). You may obtain the DEQ-119 package from the Bureau of Chemical Release Information and Prevention. An incomplete trade secret claim submission will invalidate the claim.

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CHEMICAL RELEASE INFORMATION & PREVENTION
STATION PLAZA 4, 22 S. CLINTON AVENUE - 3RD FLOOR
P.O. BOX 405
TRENTON, NEW JERSEY 08625-0405

- 2. Send a copy of the Release and Pollution Prevention Report to the county lead agency (see Appendix D) for the county where your facility is located.
- 3. Keep a copy of the Release and Pollution Prevention Report for your records. The law requires that you make the report available to your employees upon request.

For additional assistance or if you have any questions about completing Sections A and B of the RPPR, contact the DEP's Bureau of Chemical Release Information and Prevention at (609) 292-6714. For additional assistance or if you have any questions regarding the Pollution Prevention reporting requirements (Section C and Section D of the RPPR or the Pollution Prevention Process Level Data Worksheet – P2-115), call the Office of Pollution Prevention and Permit Coordination at (609) 777-0518.

APPENDIX A

CHEMICAL ACTIVITY DEFINITIONS

Pursuant to the New Jersey Pollution Prevention Act (N.J.S.A. 13:1D-35 et seq.), and regulations adopted pursuant to the Worker and Community Right to Know Act at N.J.A.C. 7:1G-1 et seq., all facilities subject to the reporting requirements of Section 313 of the federal Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) [also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)] are required to complete the New Jersey Release and Pollution Prevention Report for all substances found in Appendices B and C that were manufactured, processed, or otherwise used in excess of 10,000 pounds or the lower PBT threshold in calendar year 2000.

Manufacture means to produce, for on-site use, for sale or distribution, as a by-product, or as an impurity; to prepare; to import; or to compound any of the substances on the list. Import is defined as causing the substance to be imported into the customs territory of the United States. Do not overlook coincidental manufacture (e.g. as a byproduct or impurity) of the chemical or chemical categories (including, but not limited to, nitrate compounds, metal compounds, cyanide compounds, etc.).

<u>Process</u> in general, includes making mixtures, repackaging, or using a substance as a feedstock, raw material, starting material, or intermediate material for making another chemical. Processing also includes incorporating a substance into an article (e.g., using dyes to color fabric) or processing the substance as an impurity.

Otherwise Use means any use of a reportable substance, including a toxic substance contained in a mixture or other trade name product or waste, that is not covered by the terms "manufacture" or "process." Otherwise use of a substance does not include disposal, stabilization (without subsequent distribution in commerce), or treatment for destruction unless:

- (1) The toxic substance that was disposed, stabilized, or treated for destruction was received from off-site for the purposes of further waste management; or
- (2) The toxic substance that was disposed, stabilized, or treated for destruction was manufactured as a result of waste management activities on materials received from off-site for the purposes of further waste management activities. Relabeling or redistributing of the toxic substance where no repackaging of the substance occurs does not constitute otherwise use or processing of the substance.

APPENDIX B

EPCRA SECTION 313 TOXIC CHEMICAL LIST

Specific reportable substances are listed in alphabetical order beginning on page B-2. A list of the same substances in CAS Number order begins on page B-11. Reportable chemical categories are found in APPENDIX C.

Certain substances listed in Appendix B have parenthetic "qualifiers." These qualifiers indicate that these substances are subject to the reporting requirements if manufactured, processed, or otherwise used in a specific form. The following substances are reportable <u>only</u> if they are manufactured, processed, or otherwise used in the specific form(s) listed below:

```
CAS Number
                                                                         Oualifier
Aluminum (fume or dust) dust form.
                                                                    7429-90-5 only if it is in a fume or
Aluminum oxide (fibrous forms)
                                                            1344-28-1 only if it is a fibrous form.
Ammonia (includes anhydrous ammonia and aqueous ammonia forms;
                                                                    7664\text{-}\,41\text{-}\,7 _{\text{Only}} 10 percent of aqueous
from water dissociable ammonium salts and other sources;
                                                                                         100
                                                                                                 percent
                                                                                                               of
anhydrous forms.
10 percent of total aqueous ammonia is reportable under
this listing)
                                                            1332-21-4 only if it is a friable form.
Asbestos (friable)
_{\tt Hydrochloric\ acid} (acid aerosols including mists, vapors, defined.
                                                                    7647-01-0 only if it is an aerosol as
gas, fog, and other airborne species of any particle size)
Phosphorus (yellow or white) form.
                                                            7723-14-0 _{only} if it is a yellow or white
_{\mbox{\scriptsize Sulfuric acid}} (acid aerosols including mists, vapors, gas, defined.
                                                                    7664-93-9 only if it is an aerosol as
fog, and other airborne species of any particle size)
_{\tt Vanadium} (except when contained In an alloy) an alloy.
                                                                    7440-62-2 Except if it is contained in
_{
m zinc} (fume or dust) form.
                                                            7440-66-6 only if it is in a fume or dust
```

The qualifier for the following three chemicals is based on the chemical activity rather than the form of the chemical. These chemicals are subject to EPCRA section 313 and NJ RPPR reporting requirements only when the indicated activity is performed.

Chemical	CAS Number	Qualifier				
$_{\mbox{\scriptsize Dioxin}}$ and dioxin-like $_{\mbox{\scriptsize compounds}}$ (manufacturing; and the the	N150	only if	they ar	e mar	nufactur	ed at
processing or otherwise use of dioxin and dioxin	-like	f	acility;	or a	are pro	cessed
or otherwise compounds if the dioxin and dioxin-like compound contaminants in a	s are	u	ısed wh	ien	present	as
present as contaminants in a chemical and if the	y were	C	hemi cal	but	only if	they
were created created during the manufacture of that chemical) manufacture of that chemical.			du	ri ng		the
Isopropyl alcohol (manufacturing - strong acid proces manufactured by the	s, 6	67-63-0 <u>o</u>	_{nly} if	it	is	bei ng
no supplier notification)		s	strong ac	id pro	ocess.	
Saccharin (manufacturing - no supplier notification manufactured.	8	31-07-2 ₀	_{nly} if	it	is	bei ng

Following is a table of the Persistent, Bioaccumulative, and Toxic (PBT) chemicals affected by the new USEPA rule, and their new reporting thresholds. An asterisk indicates the PBT chemicals newly added to the EPCRA Section 313 list of toxic chemicals and the New Jersey Environmental Hazardous Substance List for reporting year 2000.

Persistent, Bioaccumulative, and Toxic Chemicals covered by the USEPA October 29, 1999 Rule

			Section 313
	RTK	CAS#	Reporting
Chemical Name or Chemical Category	Number	(Group #)	Threshold
			(in pounds unless
			noted otherwise)
Aldrin	0033	309-00-2	100
Benzo(g,h,l)perylene*	2968	191-24-2	10
Chlordane	0361	57-74-9	10
Dioxin and dioxin-like compounds category*1,2	3760	N150	0.1 gram
Heptachlor	0974	76-44-8	10
Hexachlorobenzene	0978	118-74-1	10
Isodrin	2499	465-73-6	10
Mercury	1183	7439-97-6	10
Mercury compounds	2414	N458	10
Methoxychlor	1210	72-43-5	100
Octachlorostyrene*	3761	29082-74-4	10
Pendimethalin	3415	40487-42-1	100
Pentachlorobenzene*	3417	608-93-5	10
Polychorinated biphenyls (PCBs)	1554	1336-36-3	10
Polycyclic aromatic compounds category*2,3	3758	N590	100
Tetrabromobisphenol A*	3763	79-94-7	100
Toxaphene	1871	8001-35-2	10
Trifluralin	1918	1582-09-8	100

^{1.} manufacturing; and the processing or otherwise use of dioxin and dioxin-like compounds if the dioxin and dioxin-like compounds are present as contaminants in a chemical and if they were created during the manufacturing of that chemical

De minimis <u>CAS Number</u> <u>Concentrati</u>	<u>Number</u>	Substance Name
71751-41-2 1.0	3175	Abamectin [Avermectin B1]
30560-19-1 1.0	3140	Acephate (Acetyl phosphorami dothi oi c acid 0, S-di methyl ester)
75-07-0 0.1	0001	Acetal dehyde
60-35-5 0.1	2890	Acetami de
75-05-8 1.0	0008	Acetonitrile
98-86-2 1.0	2961	Acetophenone
53-96-3	0010	2-Acetyl ami nofl uorene
$ \begin{array}{c} 0.1 \\ 62476 - 59 - 9 \\ 1.0 \end{array} $	3455	Acifluorfen, sodium salt
1.0		$\hbox{[5-(2-Chloro-4-(trifluoromethyl)phenoxy)-2-nitrobenzoic}\qquad acid,\qquad sodium$
salt] 107-02-8 1.0	0021	Acrol ei n
79-06-1 0.1	0022	Acryl ami de
79- 10- 7	0023	Acrylic acid
1. 0 107- 13- 1	0024	Acrylonitrile
0. 1 15972-60-8	3143	Alachlor
1. 0 116- 06- 3	0031	Al di carb
1. 0 309-00-2	0033	Al dri n

^{2.} see Appendix C for the specific substances reportable under this category

^{3.} two chemicals, benzo(j,k)fluorene (206-44-0) and 3-methylcholanthrene (56-49-5), were added to this category

```
PBT
                                  [1,4:5,8-Di\,methan on a phthal\,ene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.al\,pha.,4.al\,pha.,4a.beta.,5.al\,pha.,8.al\,pha.,8a.beta.)-] d-trans-Allethrin [d-trans-Chrysanthemic acid of d-allethrone]
28057-48-9
                    3647
   1. 0
107- 18- 6
                    0036
                                  Allyl alcohol
         1.0
   107-11-9
                    0037
                                  Allylamine
         1.0
   107-05-1
                    0039
                                  Allyl chloride
         1. 0
 7429-90-5
1.0
                    0054
                                  Aluminum (fume or dust)
 1344-28-1
                    2891
                                  Aluminum oxide (fibrous form)
1. 0
20859-73-8
                    0063
                                  Al umi num phosphi de
   1. 0
834-12-8
                    3150
                                  Ametryn
         1.0
                                  (N- Ethyl - N' - (1- methyl ethyl ) - 6- (methyl thi o) - 1, 3, 5, - tri azi ne- 2, 4- di ami ne) 2- Ami noanthraqui none
   117-79-3
                    0069
    0. 1
60- 09- 3
                    0508
                                  4- Ami noazobenzene
         0.1
```

<i>5</i>	RTK	
De minimis <u>CAS Number</u>	<u>Number</u>	Substance Name
<u>Concentrati</u> 92-67-1	on 0072	4- Ami nobi phenyl
0. 1 82-28-0	0076	1-Ami no-2-methyl anthraqui none
0. 1 33089- 61- 1	3156	Amitraz
1. 0 61-82-5	0083	Ami trol e
0. 1 7664-41-7	0084	Ammonia (includes anhydrous ammonia and aqueous ammonia from water
1. 0 101- 05- 3 1. 0	3648	dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing) Anilazine [4,6-Dichloro-N-(2-chlorophenyl)-1,3,5-triazin-2-amine]
62-53-3 1.0	0135	Aniline
90- 04- 0 0. 1	1421	o- Ani si di ne
104-94-9 1.0	2893	p- Ani si di ne
134-29-2 0. 1	1422	o-Ani si di ne hydrochl ori de
120- 12- 7 1. 0	0139	Anthracene
7440-36-0 1.0	0141	Anti mony
7440-38-2 0.1	0152	Arsenic
1332-21-4 0. 1	0164	Asbestos (friable)
1912-24-9 1.0	0171	Atrazine
7440-39-3 1.0	0180	(6-Chloro-N-ethyl-N'-(1-methylethyl)-1, 3, 5-tri azi ne-2, 4-di ami ne) Bari um
22781 - 23 - 3 1. 0	0191	Bendiocarb [2, 2-Dimethyl-1, 3-benzodioxol-4-ol methylcarbamate]
1861-40-1 1.0	3181	Benfluralin
17804-35-2	0192	(N-Butyl-N-ethyl-2, 6-dinitro-4-(trifluoromethyl) benzenamine) Benomyl
1. 0 98-87-3 1. 0	0195	Benzal chloride
55-21-0	2895	Benzami de
1.0 71-43-2	0197	Benzene
0. 1 92-87-5	0204	Benzi di ne
0. 1 191-24-2	2968	Benzo(g, h, l) peryl ene
PBT 98- 07- 7 0. 1	0212	Benzoic trichloride (Benzotrichloride)
98-88-4 1.0	0214	Benzoyl chloride
94-36-0 1.0	0215	Benzoyl peroxide
100-44-7 1.0	0217	Benzyl chloride
7440-41-7 0.1	0222	Beryllium
82657-04-3 1.0	3194	Bi fenthri n
92-52-4 1.0	0795	Bi phenyl
111-91-1 1.0	2971	Bis(2-chloroethoxy) methane
111-44-4 1.0	0232	Bis(2-chloroethyl) ether
542-88-1 0.1	0234	Bis(chloromethyl) ether
108-60-1 1.0	0235	Bis(2-chloro-1-methylethyl)ether
56-35-9 1.0	3479	Bis(tributyltin) oxide
1. U 10294- 34- 5	0245	Boron trichloride

	
RTK	
Number on	Substance Name
0246	Boron trifluoride
0251	Bromaci l
3651	(5-Bromo-6-methyl-3-(1-methyl propyl)-2, 4-(1H, 3H)-pyri mi di nedi one) Bromacil, lithium salt (2, 4-(1H, 3H)-Pyri mi di nedi one, 5-bromo-6-methyl-3-
	(1-methylpropyl), lithium salt)
0252	Bromi ne
3652	1-Bromo-1-(bromomethyl)-1, 3-propanedicarbonitrile
0384	Bromochlorodifluoromethane (Halon 1211)
0262	Bromoform (Tribromomethane)
1231	Bromomethane (Methyl bromide)
1912	Bromotrifluoromethane (Halon 1301)
3211	Bromoxynil (3, 5-Dibromo-4-hydroxybenzonitrile)
3212	Bromoxynil octanoate (Octanoic acid, 2,6-dibromo-4-cyanophenyl ester)
0270	Bruci ne
0272	1, 3-Butadi ene
0278	Butyl acrylate
1330	n-Butyl alcohol
1645	sec-Butyl alcohol
1787	tert-Butyl alcohol
0287	1, 2-Butyl ene oxide
0299	Butyraldehyde
0442	C. I. Acid Green 3
0445	C. I. Acid Red 114
0448	C.I. Basic Green 4
0449	C.I. Basic Red 1
0453	C.I. Direct Black 38
0462	C. I. Direct Blue 6
3661	C. I. Direct Blue 218
0478	C. I. Direct Brown 95
0503	C. I. Disperse Yellow 3
0504	C. I. Food Red 5
	Number on 0246 0251 3651 0252 3652 0384 0262 1231 1912 3211 3212 0270 0272 0278 1330 1645 1787 0287 0299 0442 0445 0448 0449 0453 0462 3661 0478 0503

.	RTK	
De minimis <u>CAS Number</u>	<u>Number</u>	Substance Name
Concentration 81-88-9	<u>0505</u> 0505	C. I. Food Red 15
1. 0 3118- 97- 6	0506	C. I. Solvent Orange 7
1. 0 97- 56- 3	0507	C.I. Solvent Yellow 3
1. 0 842-07-9	0509	C.I. Solvent Yellow 14
1. 0 492-80-8 0. 1	2894	C. I. Solvent Yellow 34 (Auramine)
128-66-5 1.0	0512	C.I. Vat Yellow 4
7440-43-9 0.1	0305	Cadmi um
156-62-7 1.0	0316	Calcium cyanamide
133-06-2 1.0	0339	Captan
	rahydro- 2- 0218	[1H-Isoindole-1,3(2H)-dione, -[(trichloromethyl)thio]-] Carbaryl [1-Naphthalenol, methylcarbamate]
1563-66-2 1.0	0341	Carbofuran
75-15-0 1.0	0344	Carbon di sul fi de
56-23-5 0. 1	0347	Carbon tetrachloride
463-58-1 1.0	0349	Carbonyl sulfide
5234-68-4 1.0	3224	Carboxi n (5, 6-Di hydro-2-methyl-N-phenyl-1, 4-oxathi i n-3-carboxami de)
120-80-9 1.0	0722	Catechol
2439-01-2 1.0	3654	Chi nomethi onat $(6-Methyl-1, 3-dithi olo[4, 5-b]qui noxal in-2-one)$
133-90-4 1.0	0357	Chloramben [Benzoic acid, 3-amino-2, 5-dichloro-]
57-74-9 PBT	0361	Chlordane
115-28-6 0.1	3228	[4,7-Methanoi ndan, 1,2,3,4,5,6,7,8,8-octachl oro-2,3,3a,4,7,7a-hexahydro-] Chlorendi c $$ aci d
90982-32-4	3229	Chlori muron ethyl (Ethyl-2-[[[(4-chloro-6-methoxypri mi din-2-yl)-
1. 0 7782-50-5	0367	carbonyl]-ami no]sul fonyl]benzoate) Chl ori ne
1. 0 10049- 04- 4	0368	Chlorine dioxide
1. 0 79- 11- 8	0373	Chloroacetic acid
1. 0 532-27-4	0048	2-Chl oroacetophenone
1. 0 4080- 31- 3 1. 0	3655	1- (3-Chloroallyl)-3, 5, 7-tri aza-1-azoni aadamantane chlori de
106-47-8 0. 1	2964	p- Chl oroani l i ne
108-90-7 1.0	0379	Chlorobenzene
510-15-6 1.0	0205	Chlorobenzilate [Benzeneacetic acid, 4-chloroalpha(4-chlorophenyl)-
75-68-3 1.0	0385	.alphahydroxy-, ethyl ester] 1-Chloro-1,1-difluoroethane (HCFC-142b)
75-45-6 1.0	0386	Chlorodifluoromethane (HCFC-22)
75-00-3 1.0	0863	Chloroethane (Ethyl chloride)
67-66-3 0.1	0388	Chloroform
74-87-3 1.0	1235	Chloromethane (Methyl chloride)
107-30-2 0.1	0391	Chloromethyl methyl ether
563-47-3 0.1	1223	3-Chloro-2-methyl-1-propene

De minimis CAS Number Number Concentration Substance Name 104-12-1 3656 p-Chlorophenyl isocyanate 1.0 76-06-2 0405 Chl oropi cri n 1.0 126-99-8 0407 Chl oroprene 1.0 542-76-7 2711 3-Chl oropropi oni tri l e 1.0 63938-10-3 0414 Chl orotetrafl uoroethane 1.0 354-25-6 3606 1-Chloro-1, 1, 2, 2-tetrafluoroethane (HCFC-124a) 1.0 2837-89-0 3607 2-Chloro-1, 1, 1, 2-tetrafluoroethane (HCFC-124) 1.0 1897-45-6 0415 Chlorothalonil [1, 3-Benzenedicarbonitrile, 2, 4, 5, 6-tetrachloro-] 1.0 95-69-2 3657 p-Chl oro-o-tol ui di ne 0.1 75-88-7 3658 2-Chloro-1, 1, 1-trifluoroethane (HCFC-133a) 1. 0 75- 72- 9 0425 Chlorotri fluoromethane (CFC-13) 1.0 3659 3-Chloro-1, 1, 1-trifluoropropane (HCFC-253fb) 460-35-5 1.0 5598-13-0 3660 Chlorpyrifos methyl 1.0 $\begin{array}{ll} (0,0\text{-Dimethyl-0-}(3,5,6\text{-trichloro-2-pyridyl}) \, phosphorothioate) \\ \text{Chloro-N-} \left[\left[\left(4\text{-methoxy-6-methyl-1},3,5\text{-triazin-2-yl}\right)\right. \right. \end{array}$ 64902-72-3 3574 1.0 ami no] carbonyl] benzenesul fonami de) 7440-47-3 0432 Chromi um 1.0 7440-48-4 0520 Cobal t 0.1 7440-50-8 0528 Copper 1.0 8001-58-9 0517 Creosote 0. 1 120-71-8 1467 p-Cresi di ne 0.1 108-39-4 1161 m-Cresol 1. 0 95-48-7 1426 o-Cresol 1.0 106-44-5 1468 p-Cresol 1.0 1319-77-3 0537 Cresol (mixed isomers) 1.0 4170-30-3 2888 Crotonal dehyde 1.0 98-82-8 0542 Cumene 1.0 80-15-9 0543 Cumene hydroperoxi de 1.0 135-20-6 0545 Cupferron [Benzeneamine, N-hydroxy-N-nitroso, ammonium salt] 0.1 21725-46-2 0240 Cyanazi ne 1.0 1134-23-2 3662 Cycloate 1.0 110-82-7 0565 Cycl ohexane 1.0 108-93-0 0569 Cycl ohexanol 1.0

	RTK	
De minimi <u>CAS Number</u>	<u>Number</u>	Substance Name
<u>Concentrat</u> 68359-37-5 1.0	<u>i on</u> 3180	$Cyfluthrin \hbox{(3-(2,2-Dichloroethenyl)-2,2-dimethyl cyclopropanecarboxylic}$
68085-85-8 1.0	3248	acid, cyano(4-fluoro-3-phenoxyphenyl)methyl ester) Cyhalothrin (3-(2-Chloro-3, 3, 3-trifluoro-1-propenyl)-2, 2-Dimethylcyclo-
94-75-7	0593	propanecarboxylic acid cyano(3-phenoxyphenyl) methyl ester) 2,4-D [Acetic acid, (2,4-dichloro-phenoxy)-]
0. 1 533-74-4	3664	Dazomet (Tetrahydro- 3, 5- di methyl - 2H- 1, 3, 5- thi adi azi ne- 2- thi one)
1. 0 53404-60-7	3665	Dazomet, sodium salt
1. 0		(Tetrahydro-3, 5-dimethyl-2H-1, 3, 5-thiadiazine-2-thione, ion(1-), sodium)
94-82-6	3271	2, 4-DB
1. 0 1929- 73- 3	2949	2, 4-D butoxyethyl ester
0. 1 94-80-4	2943	2, 4-D butyl ester
0. 1 2971-38-2	2947	2, 4-D chlorocrotyl ester
0. 1 1163- 19- 5	0598	Decabromodi phenyl oxi de
1. 0		
13684-56-5 1.0	3666	Desmedi pham
1928-43-4 0. 1	3667	2, 4-D 2-ethylhexyl ester
53404-37-8 0.1	3668	2, 4-D 2-ethyl-4-methylpentyl ester
2303-16-4 1.0	0608	Diallate
615-05-4	0611	[Carbamothioic acid, bis(1-methylethyl)-S-(2, 3-dichloro-2-propenyl)ester] 2, 4-Di ami noani sole
0. 1 39156-41-7	2899	2, 4-Di ami noani sole sul fate
0. 1 101-80-4	0612	4, 4' - Di ami nodi phenyl ether
0. 1 95-80-7	0613	2, 4- Di ami notol uene
0. 1 25376-45-8	2134	Diaminotoluene (mixed isomers)
0. 1 333-41-5 1. 0	0618	Di azi non
334-88-3	0620	Diazomethane
1. 0 132-64-9	2230	Di benzofuran
1. 0 96-12-8	0595	1, 2-Di bromo- 3- chl oropropane (DBCP)
0. 1 106- 93- 4	0877	1, 2-Di bromoethane (Ethyl ene di bromi de)
0.1 $124-73-2$	3137	Dibromotetrafluoroethane (Halon 2402)
1. 0 84- 74- 2	0773	Dibutyl phthalate
1. 0 1918- 00- 9	0634	Di camba (3, 6-Di chl oro-2-methyoxybenzoi c aci d)
1. 0 99- 30- 9	3671	Di chl oran (2, 6- Di chl oro- 4- ni troani l i ne)
1. 0 95- 50- 1	0642	1, 2- Di chl orobenzene
1. 0 541-73-1 1. 0	2301	1, 3- Di chl orobenzene
106-46-7	0643	1, 4- Di chl orobenzene
0. 1 25321-22-6	2321	Dichlorobenzene (mixed isomers)
0. 1 91- 94- 1	0644	3, 3' - Di chl orobenzi di ne
0. 1 612-83-9	3267	3, 3' - Di chl orobenzi di ne di hydrochl ori de
0. 1 64969- 34- 2	3672	3, 3' - Di chl orobenzi di ne sul fate
0. 1 75-27-4 1. 0	2341	Di chl orobromomethane

De minimis AS Number Number Concentration CAS Number Substance Name 764-41-0 3070 1, 4-Di chl oro-2-butene 1.0 110-57-6 trans-1, 4-Di chl oro-2-butene 2829 1.0 1649-08-7 3673 1, 2-Di chloro-1, 1-di fluoroethane (HCFC-132b) 1.0 75-71-8 Dichlorodifluoromethane (CFC-12) 0649 1.0 107-06-2 0652 1, 2-Dichloroethane (Ethylene dichloride) 0.1 540-59-0 0653 1, 2-Di chl oroethyl ene 1.0 1717-00-6 3270 1, 1-Dichloro-1-fluoroethane (HCFC-141b) 1.0 75-43-4 3109 Dichlorofluoromethane (HCFC-21) 1.0 75-09-2 1255 Dichloromethane (Methylene chloride) 0.1 127564-92-5 3681 Di chl oropentafl uoropropane 1.0 13474-88-9 3679 1, 1-Di chl oro-1, 2, 2, 3, 3-pentafl uoropropane (HCFC-225cc) 1.0 3680 1, 1-Di chl oro-1, 2, 3, 3, 3-pentafl uoropropane (HCFC-225eb) 111512-56-2 1.0 422-44-6 3674 1, 2-Di chl oro-1, 1, 2, 3, 3-pentafl uoropropane (HCFC-225bb) 1.0 431-86-7 3677 1, 2-Di chl oro-1, 1, 3, 3, 3-pentafl uoropropane (HCFC-225da) 1.0 507-55-1 3678 1, 3-Di chl oro-1, 1, 2, 2, 3-pentafl uoropropane (HCFC-225cb) 136013-79-1 3683 1, 3-Di chl oro-1, 1, 2, 3, 3-pentafl uoropropane (HCFC-225ea) 1.0 128903-21-9 3682 2, 2-Di chl oro-1, 1, 1, 3, 3-pentafl uoropropane (HCFC-225aa) 1.0 422-48-0 3675 2, 3-Di chl oro-1, 1, 1, 2, 3-pentafl uoropropane (HCFC-225ba) 1.0 422-56-0 3676 3, 3-Di chl oro-1, 1, 1, 2, 2-pentafl uoropropane (HCFC-225ca) 1.0 97-23-4 3684 Di chl orophene (2, 2' - Methyl enebi s (4- chl orophenol) 1.0 120-83-2 2344 2, 4-Di chl orophenol 1. 0 78- 87- 5 0664 1, 2-Di chl oropropane 1.0 10061-02-6 3685 trans-1, 3-Di chl oropropene 0.1 78-88-6 2929 2, 3-Di chl oropropene 1.0 542-75-6 0666 1, 3-Di chl oropropyl ene 0. 1 76-14-2 0671 Dichlorotetrafluoroethane (CFC-114) 1.0 34077-87-7 3608 Di chl orotri fl uoroethane 1.0 90454-18-5 3609 Di chl oro-1, 1, 2-tri fl uoroethane 1.0 812-04-4 3611 1, 1-Dichloro-1, 2, 2-trifluoroethane (HCFC-123b) 1.0 354-23-4 3612 1, 2-Dichloro-1, 1, 2-trifluoroethane (HCFC-123a) 1.0 306-83-2 3613 2, 2-Di chloro-1, 1, 1-trifluoroethane (HCFC-123) 1.0 62-73-7 0674 Dichlorvos [Phosphoric acid, 2-dichloroethenyl dimethyl ester] 0.1

De minimis <u>CAS Number</u> <u>Number</u> **Substance Name Concentration** 51338-27-3 3686 Diclofop methyl 1.0 (2-[4-(2, 4-Dichlorophenoxy) phenoxy] propanoic acid, methyl ester) 115-32-2 0675 Di cofol 1.0 [Benzenemethanol, 4-chloro-.alpha.-4-(chlorophenyl)-.alpha.-(trichloromethyl)-] 77-73-6 0681 Di cycl opentadi ene 1.0 1464-53-5 0685 Di epoxybutane 0.1 111-42-2 0686 Di ethanol ami ne 1.0 38727-55-8 3687 Diethatyl ethyl 1.0 117-81-7 0238 Di (2-ethylhexyl) phthalate (DEHP) 0.1 64-67-5 0710 Diethyl sulfate 0.1 35367-38-5 3276 Di fl ubenzuron 1.0 101-90-6 2054 Diglycidyl resorcinol ether 0.1 0199 94-58-6 Di hydrosafrol e 0.1 55290-64-7 3278 Dimethipin (2, 3, - Dihydro-5, 6-dimethyl-1, 4-dithiin 1, 1, 4, 4-tetraoxide) 1.0 60-51-5 0733 Dimethoate 1.0 119-90-4 0734 3, 3' - Di methoxybenzi di ne 0.1 20325-40-0 3692 3, 3' - Di methoxybenzi di ne di hydrochl ori de (o-Di ani si di ne di hydrochl ori de) 0.1 111984-09-9 3693 3, 3' - Di methoxybenzi di ne hydrochl ori de (o-Di ani si di ne hydrochl ori de) 0.1 124-40-3 0737 Di methyl ami ne 1.0 2300-66-5 3694 Dimethylamine dicamba 1.0 60-11-7 0739 4-Di methyl ami noazobenzene 0.1 0741 121-69-7 N, N-Dimethyl aniline 1.0 119-93-7 0742 3, 3' - Di methyl benzi di ne (o-Tol i di ne) 0.1 612-82-8 3695 3, 3' - Di methyl benzi di ne di hydrochl ori de (o-Tol i di ne di hydrochl ori de) 0.1 41766-75-0 3696 3, 3' - Di methyl benzi di ne di hydrofl uori de (o-Tol i di ne di hydrofl uori de) 0.1 79-44-7 0746 Dimethyl carbamyl chloride 0. 1 2524-03-0 0770 Dimethyl chlorothiophosphate 1.0 68-12-2 0759 N, N-Di methyl formami de 0.1 57-14-7 0761 1, 1-Dimethyl hydrazine 0.1 105-67-9 0764 2, 4-Di methyl phenol 1.0 576-26-1 3285 2, 6-Di methyl phenol 1.0 131-11-3 0765 Dimethyl phthalate 1.0 77-78-1 0768 Dimethyl sulfate 0.1 99-65-0 3017 m-Dinitrobenzene 1 0 528-29-0 3018 o-Di ni trobenzene 1.0 100-25-4 3019 p-Di ni trobenzene 1.0 88-85-7 2354 Dinitrobutyl phenol (Dinoseb) 1. 0 534-52-1 0779 4, 6-Dinitro-o-cresol 1.0 51-28-5 2950 2, 4-Di ni trophenol

De minimis CAS Number Number Concentration Substance Name 121-14-2 0783 2, 4-Di ni trotol uene 0.1 606-20-2 0784 2, 6-Dinitrotoluene 0.1 25321-14-6 2985 Dinitrotoluene (mixed isomers) 1.0 39300-45-3 3699 Di nocap 1.0 123-91-1 0789 1, 4-Di oxane 0.1 957-51-7 3290 Di phenami d 1.0 122-39-4 0796 Di phenyl ami ne 1.0 122-66-7 0800 1, 2-Di phenyl hydrazi ne (Hydrazobenzene) 0.1 2164-07-0 3700 Dipotassium endothall 1.0 $(7\hbox{-} 0xabi\,cycl\,o(2,2,1)\,heptane\hbox{-}\,2,\,3\hbox{-}\,di\,carboxyl\,i\,c\,\,aci\,d,\,\,di\,potassi\,um\,\,sal\,t)}$ Di propyl i soci nchomeronate 136-45-8 3701 1.0 3702 138-93-2 Di sodi um cyanodi thi oi mi docarbonate 1.0 94-11-1 2941 2, 4-D isopropyl ester 0.1 541-53-7 2368 2, 4-Di thi obi uret 1.0 330-54-1 0819 Di uron 1.0 2439-10-3 3579 Dodine (Dodecyl guani dine monoacetate) 1.0 120-36-5 3076 2, 4-DP 0.1 1320-18-9 2944 2, 4-D propylene glycol butyl ether ester 0. 1 2702-72-9 3297 2, 4-D sodium salt 0.1 106-89-8 0828 Epi chl orohydri n 0.1 13194-48-4 2395 Ethoprop (Phosphorodithioic acid 0-ethyl S, S-dipropyl ester) 1.0 110-80-5 0839 2-Ethoxyethanol 1.0 140-88-5 0843 Ethyl acrylate 0.1 100-41-4 0851 Ethyl benzene 1.0 541-41-3 0865 Ethyl chloroformate 1.0 759-94-4 3300 Ethyl dipropylthiocarbamate (EPTC) 1.0 74-85-1 0873 Ethyl ene 1.0 107-21-1 0878 Ethylene glycol 1.0 151-56-4 0881 Ethyl enei mi ne (Azi ri di ne) 0.1 75-21-8 0882 Ethyl ene oxi de 0. 1 96-45-7 0883 Ethylene thiourea 0.1 0651 75-34-3 Ethylidene dichloride 1.0 52-85-7 2915 **Famphur** 1.0

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De minimis
 <u>CAS Number</u>
                Number
                           Substance Name
  <u>Concentration</u>
60168-88-9
               3703
                          Fenari mol
       1.0
                           (. al pha. - (2-Chl orophenyl) - . al pha. - 4-chl orophenyl) - 5-pyri mi di nemethanol) Fenbutati noxi de (Hexaki s(2-methyl-2-phenyl propyl) di stannoxane)
 13356-08-6
                3704
        1.0
 66441-23-4
                3705
                           Fenoxaprop ethyl
        1.0
                            (2-(4-((6-Chl oro-2-benzoxazol yl en) oxy) phenoxy) propanoi c
                                                                                                  acid,
                                                                                                             ethyl
ester)
 72490-01-8
                3706
                           Fenoxycarb (2-(4-Phenoxy-phenoxy)-ethyl]carbamic acid ethyl ester)
        1.0
 39515-41-8
                3253
                           Fenpropathrin (2, 2, 3, 3-Tetramethylcyclopropane carboxylic acid
        1.0
                           cyano(3-phenoxyphenyl) methyl ester)
    55-38-9
                0916
                           Fenthi on
        1.0
                            (0, 0-Dimethyl 0 [3-methyl-4-(methylthio) phenyl] ester,
                                                                                                 phosphorothi oi c
acid)
 51630-58-1
                3134
                           Fenval erate (4-Chl oro- al pha-(1-methyl ethyl) benzeneacetic acid
        1.0
                           cyano(3-phenoxyphenyl) methyl ester)
Ferbam (Tris(dimethyl carbamodithioato-S, S')iron)
 14484-64-1
                0917
        1.0
                 3707
 69806-50-4
                            Fluazifop butyl
                                                (2-[4-[[5-(Tri fluoromethyl)-2-pyri di nyl]oxy]-phenoxy]
        1.0
                            propanoic acid, butyl ester)
                0935
                           Fluometuron [Urea, N, N-dimethyl-N'-[3-(trifluoromethyl)phenyl]-]
  2164-17-2
        1.0
  7782-41-4
                0937
                           Fl uori ne
        1.0
                 1966
    51-21-8
                           Fluorouracil (5-Fluorouracil)
        1.0
 69409-94-5
                 3310
                           Fluvalinate (N-[2-Chloro-4-(trifluoromethyl)phenyl]-DL-valine
        1.0
                            (+) - cyano(3-phenoxyphenyl) methyl ester)
   133-07-3
                3554
                           Fol pet
        1.0
 72178-02-0
                3312
                           Fomesafen
        1.0
                            (5-(2-Chloro-4-(trifluoromethyl)phenoxy)-N-
methyl sul fonyl - 2- ni trobenzami de)
                           Formal dehyde
    50-00-0
                 0946
    0. 1
64- 18- 6
                0948
                           Formic acid
        1.0
    76-13-1
                 1904
                           Freon 113 [Ethane, 1, 1, 2-trichloro-1, 2, 2, -trifluoro-]
        1.0
    76-44-8
                0974
                            Heptachl or
        PBT
                            [1, 4, 5, 6, 7, 8, 8-Heptachloro-3a, 4, 7, 7a-tetrahydro-4, 7-methano-1H-indene]
   118-74-1
                0978
                           Hexachl orobenzene
        PBT
    87-68-3
                0979
                           Hexachloro-1, 3-butadi ene
        1.0
   319-84-6
                0566
                           al pha-Hexachl orocycl ohexane
        1.0
    77-47-4
                0980
                           Hexachl orocycl opentadi ene
    1. 0
67- 72- 1
                0981
                           Hexachl oroethane
        1.0
  1335-87-1
                0982
                           Hexachl oronaphthal ene
        1.0
    70-30-4
                0983
                            Hexachl orophene
        1.0
   680-31-9
                0973
                           Hexamethyl phosphorami de
        0.1
   110-54-3
                 1340
                           n-Hexane
        1.0
 51235-04-2
                3339
                           Hexazi none
        1.0
 67485-29-4
                 3149
                           Hydramethyl non
(Tetrahydro- 5, 5- di methyl - 2(1H) - pyri mi di none[3- [4- (tri fl uoromethyl) phenyl] -
1- [2- [4- (tri fl uoromethyl) phenyl] ethenyl] - 2- propenyl i dene] hydrazone)
   302-01-2
                 1006
                           Hydrazi ne
        0.1
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D	RTK	
De minimis <u>CAS Number</u> Concentrati	<u>Number</u>	Substance Name
10034-93-2	2360	Hydrazine sulfate
0. 1 7647- 01- 0 1. 0	1012	Hydrochloric acid (acid aerosols including mists, vapors, gas, fog,
74-90-8 1.0	1013	and other airborne species of any particle size) Hydrogen cyanide
7664-39-3	1014	Hydrogen fluoride
1. 0 123- 31- 9	1019	Hydroqui none
1. 0 35554-44-0	3343	I mazalil (1-[2-(2, 4-Dichlorophenyl)-2-(2-propenyloxy)ethyl]-1H-i mi dazole)
1. 0 55406- 53- 6	3708	3-Iodo-2-propynyl butyl carbamate
1. 0 13463- 40- 6	1037	Iron pentacarbonyl
1. 0 78-84-2 1. 0	1051	I sobutyral dehyde
465-73-6	2499	I sodri n
PBT 25311-71-1 1.0	3709	Isofenphos (2-[[Ethoxyl[(1-methylethyl)amino]phosphinothioyl]oxy]
67-63-0	1076	benzoic acid 1-methylethyl ester) Isopropyl alcohol (manufacturing: strong acid process only)
1. 0 80- 05- 7	2388	4, 4' - I sopropyl i denedi phenol
1. 0 120- 58- 1	0198	I sosafrol e
1. 0 77501-63-4	3550	Lactofen (5-(2-Chloro-4-(trifluoromethyl)phenoxy)-2-nitro-2-
1. 0 7439-92-1	1096	ethoxy-1-methyl-2-oxoethyl ester) Lead
0. 1 58- 89- 9	1117	Li ndane [Cycl ohexane, 1, 2, 3, 4, 5, 6-hexachl oro-, (1. al pha., 2. al pha.,
0. 1 330-55-2	3352	3. beta. , 4. al pha. , 5. al pha. , 6. beta.) -] Li nuron
1. 0 554-13-2 1. 0	1124	Lithium carbonate
121-75-5	1150	Mal athi on
1. 0 108- 31- 6	1152	Maleic anhydride
1. 0 109- 77- 3 1. 0	1153	Mal ononi tri l e
12427-38-2	1154	Maneb [Carbamodithioic acid, 1,2-ethanediylbis-, manganese complex]
1. 0 7439- 96- 5 1. 0	1155	Manganese
93-65-2	3093	Mecoprop
0. 1 149- 30- 4	3710	2-Mercaptobenzothi azole (MBT)
1.0 7439-97-6 PBT	1183	Mercury
150- 50- 5 1. 0	3359	Merphos
= * *		

De minimis Substance Name <u>CAS Number</u> Number <u>Concentration</u> 126-98-7 $\overline{1}220$ Methacryl oni trile 1.0 137-42-8 3711 Metham sodium (Sodium methyl dithiocarbamate) 1.0 67-56-1 1222 Methanol 1.0 20354-26-1 Methazol e 3712 (2-(3, 4-Di chl orophenyl) - 4-methyl - 1, 2, 4-oxadi azol i di ne-3, 5-di one) 1.0 2032-65-7 Methi ocarb 1.0 94-74-6 3094 Methoxone ((4-Chloro-2-methylphenoxy) acetic acid) (MCPA) 0.1 3653-48-3 3713 Methoxone sodium salt ((4-Chloro-2-methylphenoxy) acetate sodium salt) 0.1 72-43-5 Methoxychlor [Benzene, 1, 1'-(2, 2, 2-trichloroethylidene) bis [4-methoxy-] 1210 **PBT** 109-86-4 1211 2-Methoxyethanol 1.0 96-33-3 1219 Methyl acrylate 1.0 1634-04-4 1293 Methyl tert-butyl ether 1.0 79-22-1 1238 Methyl chlorocarbonate 1.0 101-14-4 1250 4, 4' - Methyl enebis (2-chloroaniline) (MBOCA) 0.1 101-61-1 1252 4, 4' - Methyl enebi s (N, N-di methyl) benzenami ne 0. 1 74-95-3 1254 Methylene bromi de 1.0 1256 4, 4' - Methyl enedi ani l i ne 101-77-9 0. 1 78-93-3 1258 Methyl ethyl ketone 1.0 60-34-4 1265 Methyl hydrazine 1.0 1266 Methyl iodide 74-88-4 1.0 Methyl isobutyl ketone 108-10-1 1268 1.0 624-83-9 1270 Methyl isocyanate 1. 0 556-61-6 1272 Methyl isothiocyanate (Isothiocyanatomethane) 1.0 75-86-5 0007 2-Methyllactonitrile 1.0 80-62-6 1277 Methyl methacrylate 1.0 924-42-5 3715 N-Methyl ol acryl ami de 1.0 298-00-0 1283 Methyl parathion 1.0 109-06-8 2955 2-Methyl pyri di ne 1.0 872-50-4 3716 N-Methyl - 2-pyrrol i done 1.0 9006-42-2 3717 Meti ram 1.0 21087-64-5 1302 Metri buzi n 1.0 7786-34-7 3507 Mevi nphos 1.0 90-94-8 1305 Michler's ketone 0.1 2212-67-1 3718 Molinate (1H-Azepine-1 carbothioic acid, hexahydro-S-ethyl ester) 1.0 1313-27-5 1312 Molybdenum trioxide 1.0 76-15-3 0398 Monochloropentafluoroethane (CFC-115) 1.0 150-68-5 3719 1.0 505-60-2 1319 Mustard gas [Ethane, 1, 1'-thiobis[2-chloro-] 0.1 88671-89-0 3462 Mycl obutani l

1.0

RTK

De minimis	RTK	
CAS Number Concentrati	<u>Number</u> on	Substance Name
(. al pha Buty 142-59-6		- (4- chl orophenyl) - 1H- 1, 2, 4- tri azol e- 1- propaneni tri l e) Nabam
1. 0 300- 76- 5 1. 0	0751	Nal ed
91-20-3	1322	Naphthal ene
1. 0 134-32-7	1325	al pha-Naphthyl ami ne
0. 1 91-59-8	1324	beta-Naphthyl ami ne
0. 1 7440- 02- 0	1341	Ni ckel
0. 1 1929- 82- 4	1355	Ni trapyri n (2-Chl oro-6-(tri chl oromethyl) pyri di ne)
1. 0 7697- 37- 2	1356	Nitric acid
1. 0 139- 13- 9	1358	Nitrilotriacetic acid
0. 1 100- 01- 6	1548	p-Ni troani l i ne
1. 0 99- 59- 2	1388	5-Ni tro-o-ani si di ne
1. 0 98- 95- 3 0. 1	1361	Ni trobenzene
92-93-3	0229	4-Ni trobi phenyl
0. 1 1836- 75- 5	1374	Nitrofen [Benzene, 2, 4-dichloro-1-(4-nitrophenoxy)-]
0. 1 51- 75- 2	1377	Ni trogen mustard [2-Chloro-N-(2-chloroethyl)-N-methylethanamine]
0. 1 55-63-0	1383	Ni trogl yceri n
1. 0 88- 75- 5 1. 0	1391	2-Ni trophenol
100-02-7 1.0	1390	4-Ni trophenol
79-46-9 0.1	1392	2-Ni tropropane
924-16-3 0.1	1406	N- Ni trosodi - n- butyl ami ne
55- 18- 5 0. 1	1404	N- Ni trosodi ethyl ami ne
62-75-9 0.1	1405	N-Ni trosodi methyl ami ne
86-30-6 1.0	1408	N- Ni trosodi phenyl ami ne
156- 10- 5 1. 0	1551	p- Ni trosodi phenyl ami ne
621-64-7 0. 1	1407	N- Ni trosodi - n- propyl ami ne
759-73-9 0.1	1410	N- Ni troso- N- ethyl urea
684-93-5 0.1	1411	N- Ni troso- N- methyl urea
4549-40-0 0.1	2907	N- Ni trosomethyl vi nyl ami ne
59-89-2 0.1	1409	N-Ni trosomorphol i ne
16543-55-8 0. 1	2900	N-Ni trosonorni coti ne
100-75-4 0. 1	1412	N- Ni trosopi peri di ne
99- 55- 8 1. 0	1444	5-Ni tro-o-tol ui di ne

RTK

De minimis	RTK	
<u>CAS Number</u> Concentrati	<u>Number</u>	Substance Name
27314-13-2 1.0	3405	Norflurazon
(4-Chl oro- 5- (2234- 13- 1 1. 0	methylami 1427	no) - 2-[3-(trifluoromethyl) phenyl]-3(2H) - pyri dazi none) Octachl oronaphthal ene
29082-74-4	3761	Octachl orostyrene
PBT 19044-88-3 1.0	3409	Oryzal in (4-(Di propyl ami no)-3,5-di ni trobenzenesul fonami de)
20816-12-0	1441	Osmi um tetroxi de
1. 0 301-12-2 1. 0	3724	Oxydemeton methyl
19666-30-9 1.0	3410	(S-(2-(Ethyl sulfinyl) ethyl) 0, 0-dimethyl ester phosphorothioic acid) 0xydiazon (3-[2, 4-Dichloro-5-(1-methyl ethoxy) phenyl]-5-
42874-03-3 1.0	3411	(1, 1-dimethyl ethyl) - 1, 3, 4-oxadi azol - 2(3H) - one) Oxyfluorfen
10028-15-6	1451	0zone
1. 0 123-63-7 1. 0	1455	Paral dehyde
1910-42-5	1458	Paraquat dichloride
$ \begin{array}{r} 1.0 \\ 56-38-2 \\ 1.0 \end{array} $	1459	Parathion [Phosphorothioic acid, 0,0-diethyl-0-(4-nitrophenyl) ester]
1114-71-2	3725	Pebulate (Butylethylcarbamothioic acid S-propyl ester)
1. 0 40487- 42- 1 PBT	3415	Pendi methal i n (N-(1-Ethyl propyl)-3, 4-di methyl-2, 6-di ni trobenzenami ne)
608-93-5 PBT	3417	Pentachl orobenzene
76-01-7	1471	Pentachl oroethane
1. 0 87-86-5	1473	Pentachlorophenol (PCP)
0. 1 57- 33- 0	3726	Pentobarbital sodium
1. 0 79-21-0	1482	Peracetic acid
1. 0 594-42-3 1. 0	1480	Perchloromethyl mercaptan
52645-53-1 1.0	3422	Permethrin (3-(2, 2-Dichloroethenyl)-2, 2-dimethyl cyclopropane
85-01-8	3004	carboxylic acid, (3-phenoxyphenyl) methyl ester) Phenanthrene
1. 0 108- 95- 2	1487	Phenol
1. 0 26002-80-2	3727	Phenothrin (2, 2-Dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylic
1. 0 95- 54- 5	1495	acid (3-phenoxyphenyl)methyl ester) 1, 2-Phenyl enediamine
1. 0 108- 45- 2	1316	1, 3-Phenyl enedi ami ne
1. 0 106- 50- 3	1586	p- Phenyl enedi ami ne
1. 0 615-28-1	3728	1, 2-Phenyl enedi ami ne di hydrochl ori de
1. 0 624- 18- 0	3729	1, 4-Phenyl enedi ami ne di hydrochl ori de
1. 0 90-43-7 1. 0	1439	2-Phenyl phenol
57-41-0	1507	Phenytoin
0. 1 75-44-5	1510	Phosgene
1. 0 7803-51-2 1. 0	1514	Phosphine
7723-14-0 1.0	1520	Phosphorus (yellow or white)
85-44-9 1.0	1535	Phthalic anhydride
1918-02-1	1536	Picloram respention Penert

De minimis CAS Number Number Concentration Substance Name 1.0 88-89-1 1946 Picric acid 1.0 51-03-6 3732 Piperonyl butoxide 1.0 29232-93-7 3430 Pirimiphos methyl 1.0 (0-(2-(Diethylamino)-6-methyl-4-pyrimidinyl)-0,0-dimethyl phosphorothi oate) 1336-36-3 PBT Polychlorinated biphenyls (PCBs) 7758-01-2 1559 Potassium bromate 0.1 3735 128-03-0 Potassium dimethyl di thi ocarbamate 1.0 137-41-7 3736 Potassi um N-methyl di thi ocarbamate 1.0 41198-08-7 3737 Profenofos (0-(4-Bromo-2-chlorophenyl)-0-ethyl-S-propyl phosphorothioate) 1.0 7287-19-6 3437 Prometryn 1.0 (N, N' - Bis(1-methylethyl) - 6-methylthio-1, 3, 5-triazine-2, 4-diamine) 23950-58-5 1592 Pronami de 1.0 1918-16-7 3438 Propachlor (2-Chloro-N-(1-methylethyl)-N-phenylacetamide) 1.0 1120-71-4 1446 Propane sultone 0.1 709-98-8 3439 Propanil (N-(3, 4-Di chl orophenyl) propanami de) 1.0 2312-35-8 1596 Propargi te 1.0 107-19-7 1597 Propargyl alcohol 1.0 31218-83-4 3738 Propetamphos (3-[(Ethyl ami no) methoxyphosphi nothi oyl]oxy]-2-1.0 butenoic acid, 1-methylethyl ester) 60207-90-1 3442 (1-[2-(2, 4-Di chl orophenyl) - 4-propyl - 1, 3-di oxol an-2-yl]-Propi conazol e 1.0 methyl - 1H-1, 2, 4, -tri azol e) 57-57-8 0228 beta-Propi ol actone 0.1 123-38-6 1598 Propi onal dehyde 1.0 1604 Propoxur [Phenol, 2-(1-methylethoxy)-, methylcarbamate] 114-26-1 1.0 115-07-1 1609 Propylene (Propene) 1.0 75-55-8 1614 Propyl enei mi ne 0.1 75-56-9 1615 Propylene oxide 0.1 110-86-1 1624 Pyri di ne 1.0

ъ	RTK	
De minimis <u>CAS Number</u>	<u>Number</u>	Substance Name
<u>Concentrati</u> 91-22-5	on 1628	Qui nol i ne
1. 0 106- 51- 4	1460	Qui none
1. 0 82-68-8	1630	Quintozene (Pentachloronitrobenzene)
1. 0 76578- 14- 8	3173	Qui zal of op- ethyl
1. 0		(2-[4-[(6-Chloro-2-quinoxalinyl)oxy]phenoxy] propanoic acid ethyl ester)
10453-86-8 1.0	3450	Resmethrin ([5-(Phenylmethyl)-3-furanyl]methyl 2, 2-dimethyl-3-
81-07-2	1641	(2-methyl-1-propenyl)cyclopropanecarboxylate]) Saccharin (manufacturing)
0. 1 94- 59- 7	1642	Safrole
0. 1 7782-49-2 1. 0	1648	Sel eni um
74051-80-2 1.0	3453	Sethoxydim (2-[1-(Ethoxyimino) butyl]-5-[2-(ethylthio)propyl]-3-
7440-22-4 1.0	1669	hydroxyl - 2- cycl ohexen- 1- one) Si l ver
122-34-9	3454	Si mazi ne
1. 0 26628-22-8	1684	Sodi um azi de
1. 0 1982-69-0	3739	Sodium dicamba (3,6-Dichloro-2-methoxybenzoic acid, sodium salt)
1. 0 128- 04- 1	3740	Sodium dimethyl dithiocarbamate
1. 0 62-74-8	1700	Sodium fluoroacetate
1. 0 7632-00-0	2258	Sodium nitrite
1. 0 131-52-2	1712	Sodi um pentachl orophenate
1. 0 132-27-4 0. 1	3458	Sodi um o-phenyl phenoxi de
100-42-5 0.1	1748	Styrene
96-09-3 0.1	1749	Styrene oxide
7664-93-9 1. 0	1761	Sulfuric acid (acid aerosols including mists, vapors, gas, fog,
2699-79-8	1769	and other airborne species of any particle size) Sulfuryl fluoride (Vikane)
1. 0 35400-43-2	1771	Sulprofos (0-Ethyl 0-[4-(methylthio)phenyl]phosphorodithioic acid
1. 0 34014- 18- 1 1. 0	3464	S-propyl ester) Tebuthi uron
3383-96-8	1780	(N-[5-(1, 1-Dimethylethyl)-1, 3, 4-thiadiazol-2-yl)-N, N'-dimethylurea) Temephos
1. 0 5902-51-2	3466	Terbaci l
1. 0 79- 94- 7 PBT	3763	(5-Chloro-3-(1,1-dimethylethyl)-6-methyl-2,4 (1H,3H)-pyrimidinedione) Tetrabromobisphenol A
630-20-6 1. 0	2992	1, 1, 1, 2-Tetrachloroethane
79-34-5 1.0	1809	1, 1, 2, 2-Tetrachloroethane
127-18-4 0.1	1810	Tetrachloroethylene (Perchloroethylene)
354-11-0 1.0	3742	1, 1, 1, 2-Tetrachloro-2-fluoroethane (HCFC-121a)
354-14-3 1. 0	3743	1, 1, 2, 2-Tetrachloro-1-fluoroethane (HCFC-121)
961-11-5 1.0	1813	Tetrachl orvi nphos
ester]		[Phosphoric acid, 2-chloro-1-(2, 3, 5-trichlorophenyl) ethenyl dimethyl
64-75-5	3744	Tetracycline hydrochloride

2000 Release and Pollution Prevention Report

1. <u>Alphabetical Substance List</u> RTK

De minimis CAS Number Number Concentration Substance Name 7696-12-0 3745 Tetramethrin (2, 2-Dimethyl-3-(2-methyl-1-propenyl) cycl opropanecarboxylic 1.0 acid (1, 3, 4, 5, 6, 7-hexahydro-1, 3-dioxo-2H-isoindol-2-yl) methyl ester) Thallium 7440-28-0 1840 1.0 148-79-8 3746 Thi abendazol e (2-(4-Thi azol yl)-1H-benzi mi dazol e) 1.0 62-55-5 1844 Thi oacetami de 0.1 28249-77-6 3472 Thiobencarb (Carbamic acid, diethylthio-, S-(p-chlorobenzyl)) 1. 0 139-65-1 1847 4, 4' - Thi odi ani l i ne 0.1 59669-26-0 3747 Thi odi carb 1.0 23564-06-9 3748 Thi ophanate ethyl 1.0 ([1, 2-Phenylenebis (iminocarbonothioyl)] biscarbamic acid diethyl ester) Thi ophanate- methyl 23564-05-8 3473 1.0 2823 79-19-6 Thi osemi carbazi de 1.0 62-56-6 1853 Thi ourea 0.1 137-26-8 1854 Thi ram 1.0 1314-20-1 1856 Thori um di oxi de 1.0 Titanium tetrachloride 7550-45-0 1864 1.0 1866 108-88-3 Tol uene 1.0 584-84-9 1869 Tol uene-2, 4-di i socyanate 0.1 91-08-7 1868 Tol uene-2, 6-di i socyanate 0.1 26471-62-5 3132 Toluene diisocyanate (mixed isomers) 0.1 95-53-4 1442 o-Tol ui di ne 0.1 636-21-5 1443 o-Tolui di ne hydrochl ori de 0.1 8001-35-2 1871 **Toxaphene** PBT 43121-43-3 3179 Tri adi mefon 1.0 (1- (4- Chl orophenoxy) - 3, 3- di methyl - 1- (1H-1, 2, 4- tri azol - 1- yl) - 2- butanone) 2303-17-5 3474 Triallate 1.0 68-76-8 1461 Tri azi quone [2, 5-Cycl ohexadi ene-1, 4-di one, 2, 3, 5-tri s(1-azi ri di nyl)-] 1.0 101200-48-0 3749 Tribenuron methyl (2-(4-Methoxy-6-methyl-1, 3, 5-triazin-2-yl)-1.0 methylamino) carbonyl) amino) sulfonyl) -, methyl ester) Tributyltin fluoride 1983-10-4 3750 1.0

D	RTK	
De minimis CAS Number	<u>Number</u>	Substance Name
Concentration 2155-70-6	on 3751	Tributyltin methacrylate
1. 0 78- 48- 8	3360	S, S, S-Tri butyl tri thi ophosphate (DEF)
1. 0 52-68-6 1. 0	1882	Trichlorfon
76-02-8 1.0	1884	[Phosphonic acid, (2, 2, 2-trichloro-1-hydroxyethyl)-, dimethyl ester] Trichloroacetyl chloride
120-82-1 1.0	1887	1, 2, 4-Tri chl orobenzene
71-55-6 1.0	1237	1, 1, 1-Trichloroethane (Methyl chloroform)
79-00-5 1.0	1889	1, 1, 2-Tri chl oroethane
79-01-6	1890	Tri chl oroethyl ene
0. 1 75-69-4	1891	Trichlorofluoromethane (CFC-11)
1. 0 95- 95- 4 1. 0	1895	2, 4, 5-Tri chl orophenol
88-06-2	1894	2, 4, 6-Tri chl orophenol
0. 1 96- 18- 4	1902	1, 2, 3-Tri chl oropropane
0. 1 57213-69-1	3752	Triclopyr triethylammonium salt
1. 0 121-44-8	1907	Tri ethyl ami ne
1. 0 1582-09-8 2, 6-dinitro-N, 26644-46-2 1. 0	N- di propy 3753	1918 Trifluralin [Benezeneamine, vl-4-(trifluoromethyl)-] PBT Triforine
95-63-6 1.0	2716	(N, N' - [1, 4-Pi perazi nedi yl bi s(2, 2, 2-tri chl oroethyl i dene)] bi sformami de) 1, 2, 4-Tri methyl benzene
2655-15-4 1.0	3756	2, 3, 5-Tri methyl phenyl methyl carbamate
639-58-7	1952	Tri phenylti n chlori de
1. 0 76- 87- 9 1. 0	1953	Tri phenyl ti n hydroxi de
126-72-7 0.1	1957	Tris(2, 3-dibromopropyl) phosphate
72-57-1 0.1	0465	Trypan blue
51-79-6	1986	Urethane (Ethyl carbamate)
0. 1 7440- 62- 2	3762	Vanadium (except when contained in an alloy)
1. 0 50471-44-8 1. 0	3494	Vi ncl ozol i n
108-05-4	1998	(3-(3, 5-Di chl orophenyl)-5-ethenyl-5-methyl-2, 4-oxazol i di nedi one) Vi nyl acetate
0. 1 593-60-2	1999	Vi nyl bromi de
0. 1 75-01-4	2001	Vinyl chloride
0. 1 75-35-4	2006	Vinylidene chloride
1. 0 108- 38- 3 1. 0	2902	m- Xyl ene
95-47-6	2903	o- Xyl ene
1. 0 106-42-3	2904	p-Xyl ene
1. 0 1330-20-7	2014	Xylene (mixed isomers)
1. 0 87-62-7	2016	2, 6- Xyl i di ne
0. 1 7440-66-6	2021	Zinc (fume or dust)
1. 0 12122-67-7	2045	Zineb [Carbamodithioic acid, 1,2-ethanediylbis-, zinc complex]
1. 0		

RTK

De minimis

<u>CAS Number Number Substance Name</u>

<u>Concentration</u>

2. <u>List by CAS Number</u>

-		
Do minimi	RTK	
De minimi <u>CAS Number</u>	<u>Number</u>	Substance Name
Concentrat	<u>i on</u>	
50-00-0 0.1	0946	Formal dehyde
51-03-6 1.0	3732	Pi peronyl butoxi de
51-21-8 1.0	1966	Fluorouracil (5-Fluorouracil)
51-28-5 1.0	2950	2, 4-Di ni trophenol
51-75-2 0.1	1377	Nitrogen mustard [2-Chloro-N-(2-chloroethyl)-N-methylethanamine]
51-79-6 0.1	1986	Urethane (Ethyl carbamate)
52-68-6 1.0	1882	Tri chl orfon
52-85-7 1.0	2915	[Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-,dimethyl ester] Famphur
53-96-3	0010	2-Acetyl ami nofl uorene
0. 1 55- 18- 5 0. 1	1404	N- Ni trosodi ethyl ami ne
55-21-0	2895	Benzami de
1. 0 55-38-9 1. 0	0916	Fenthi on
acid)		$(0,0\text{-Dimethyl} 0\ [3\text{-methyl}\text{-}4\text{-}(\text{methylthio}) phenyl] ester, phosphorothioic$
55-63-0 1.0	1383	Nitroglycerin
56-23-5 0.1	0347	Carbon tetrachloride
56-35-9 1.0	3479	Bis(tributyltin) oxide
56-38-2 1.0	1459	Parathion [Phosphorothioic acid, 0,0-diethyl-0-(4-nitrophenyl) ester]
57-14-7 0.1	0761	1, 1-Dimethyl hydrazine
57-33-0 1.0	3726	Pentobarbital sodium
57-41-0 0.1	1507	Phenytoin
57-57-8 0.1	0228	beta-Propi ol actone

2. List by CAS Number

	RTK	
De minimis <u>CAS Number</u>	<u>Number</u>	Substance Name
Concentrati 57-74-9 PBT	on 0361	Chlordane
58-89-9 0.1	1117	[4,7-Methanoi ndan, 1,2,3,4,5,6,7,8,8-octachl oro-2,3,3a,4,7,7a-hexahydro-] Li ndane $[Cyclohexane, 1,2,3,4,5,6-hexachl oro-,(1.alpha.,2.al$
59-89-2	1409	3. beta., 4. al pha., 5. al pha., 6. beta.) -] N- Ni trosomorphol i ne
0. 1 60- 09- 3	0508	4- Ami noazobenzene
0. 1 60- <u>1</u> 1-7	0739	4- Di methyl ami noazobenzene
0. 1 60- 34- 4	1265	Methyl hydrazine
1. 0 60-35-5	2890	Acetami de
0. 1 60- 51- 5	0733	Dimethoate
1. 0 61-82-5	0083	Amitrole
0. 1 62-53-3 1. 0	0135	Ani l i ne
62-55-5	1844	Thi oacetami de
0. 1 62-56-6	1853	Thi ourea
0. 1 62-73-7	0674	Dichlorvos [Phosphoric acid, 2-dichloroethenyl dimethyl ester]
0. 1 62-74-8	1700	Sodium fluoroacetate
$ \begin{array}{c} 1.0 \\ 62-75-9 \end{array} $	1405	N-Ni trosodi methyl ami ne
0. 1 63-25-2	0218	Carbaryl [1-Naphthalenol, methylcarbamate]
1. 0 64- 18- 6	0948	Formic acid
1. 0 64- 67- 5	0710	Diethyl sulfate
0. 1 64- 75- 5	3744	Tetracycline hydrochloride
1. 0 67- 56- 1 1. 0	1222	Methanol
67-63-0 1.0	1076	Isopropyl alcohol (mfg-strong acid process)
67-66-3 0.1	0388	Chloroform
67-72-1 1.0	0981	Hexachloroethane
68-12-2 0.1	0759	N, N-Di methyl formami de
68-76-8 1.0	1461	Tri azi quone [2, 5-Cycl ohexadi ene-1, 4-di one, 2, 3, 5-tri s(1-azi ri di nyl)-]
70-30-4 1.0	0983	Hexachl orophene
71-36-3 1.0	1330	n-Butyl alcohol
71-43-2 0.1	0197	Benzene
71-55-6 1.0	1237	1, 1, 1-Trichloroethane (Methyl chloroform)
72 - 43 - 5 PBT	1210	$\label{lem:methoxychlor} \textbf{Methoxychlor} \ \ [\textbf{Benzene}, \ 1, 1' - (2, 2, 2 - \text{trichloroethylidene}) \ \textbf{bis} \ \ [\textbf{4-methoxy-}]$
72-57-1 0.1	0465	Trypan blue
74-83-9 1.0	1231	Bromomethane (Methyl bromide)
74-85-1 1.0	0873	Ethylene
74-87-3 1.0	1235	Chloromethane (Methyl chloride)
74-88-4 1.0	1266	Methyl iodide
74-90-8 1.0	1013	Hydrogen cyanide
74-95-3 1.0	1254	Methylene bromide
75-00-3	0863	Chloroethane (Ethyl chloride)
2000 Release an	a rollution P	Prevention Report B - 23

2. List by CAS Number

1.0

RTK De minimis CAS Number Number Concentration Substance Name 1.0 75-01-4 2001 Vinyl chloride 0.1 75-05-8 0008 Acetoni tri l e 1.0 75-07-0 0001 Acetal dehyde 0. 1 75-09-2 1255 Dichloromethane (Methylene chloride) 0.1 75-15-0 0344 Carbon disulfide 1. 0 75-21-8 0882 Ethyl ene oxi de 0. 1 75-25-2 0262 Bromoform (Tribromomethane) 1.0 75-27-4 2341 Di chl orobromomethane 1.0 75-34-3 0651 Ethylidene dichloride 1.0 75-35-4 2006 Vinylidene chloride 1.0 75-43-4 3109 Dichlorofluoromethane (HCFC-21) 1.0 75-44-5 1510 Phosgene 1.0 75-45-6 0386 Chlorodifluoromethane (HCFC-22) 1.0 75-55-8 1614 Propyl enei mi ne 0.1 1615 Propyl ene oxi de 75-56-9 0.1 75-63-8 1912 Bromotrifluoromethane (Halon 1301) 1.0 75-65-0 1787 tert-Butyl alcohol 1.0 75-68-3 0385 1-Chloro-1, 1-difluoroethane (HCFC-142b) 1.0 1891 Trichlorofluoromethane (CFC-11) 75-69-4 1.0 75-71-8 0649 Dichlorodifluoromethane (CFC-12) 1.0 75-72-9 0425 Chlorotrifluoromethane (CFC-13) 1.0 75-86-5 0007 2-Methyllactonitrile 1.0 75-88-7 3658 2-Chloro-1, 1, 1-trifluoroethane (HCFC-133a) 1.0 76-01-7 1471 Pentachl oroethane 1.0 76-02-8 1884 Trichloroacetyl chloride 1.0 0405 76-06-2 Chl oropi cri n 1.0 76-13-1 1904 Freon 113 [Ethane, 1, 1, 2-trichloro-1, 2, 2, -trifluoro-] 1.0 76-14-2 0671 Dichlorotetrafluoroethane (CFC-114) 1.0 76-15-3 0398 Monochloropentafluoroethane (CFC-115) 1.0 76-44-8 0974 Heptachl or PBT [1, 4, 5, 6, 7, 8, 8-Heptachloro-3a, 4, 7, 7a-tetrahydro-4, 7-methano-1H-indene] 76-87-9 1953 Tri phenyl ti n hydroxi de 1.0 77-47-4 0980 Hexachl orocycl opentadi ene

ъ	RTK	
De minimis CAS Number	<u>Number</u>	Substance Name
Concentrati 77-73-6	<u>on</u> 0681	Di cycl opentadi ene
1. 0 77- 78- 1	0768	Dimethyl sulfate
0. 1 78- 48- 8	3360	S, S, S-Tri butyl tri thi ophosphate (DEF)
1. 0 78-84-2	1051	I sobutyral dehyde
1. 0 78-87-5	0664	1, 2-Di chl oropropane
1. 0 78-88-6	2929	2, 3-Di chl oropropene
1. 0 78- 92- 2	1645	sec-Butyl alcohol
1. 0 78- 93- 3	1258	Methyl ethyl ketone
1. 0 79- 00- 5	1889	1, 1, 2-Tri chl oroethane
1. 0 79- 01- 6 0. 1	1890	Tri chl oroethyl ene
79-06-1	0022	Acryl ami de
0. 1 79- 10- 7	0023	Acrylic acid
1. 0 79-11-8	0373	Chloroacetic acid
1. 0 79- 19- 6	2823	Thi osemi carbazi de
1. 0 79-21-0	1482	Peracetic acid
1. 0 79-22-1	1238	Methyl chlorocarbonate
1. 0 79-34-5	1809	1, 1, 2, 2-Tetrachl oroethane
1. 0 79-44-7	0746	Di methyl carbamyl chlori de
0. 1 79-46-9	1392	2-Ni tropropane
0. 1 79- 94- 7 PBT	3763	Tetrabromobi sphenol A
80-05-7	2388	4, 4' - I sopropyl i denedi phenol
1. 0 80-15-9	0543	Cumene hydroperoxi de
1. 0 80-62-6	1277	Methyl methacrylate
1. 0 81-07-2	1641	Saccharin (manufacturing)
0. 1 81-88-9 1. 0	0505	C. I. Food Red 15
82-28-0	0076	1- Ami no- 2- methyl anthraqui none
0. 1 82-68-8	1630	Quintozene (Pentachloroni trobenzene)
1. 0 84- 74- 2	0773	Dibutyl phthalate
1. 0 85-01-8	3004	Phenanthrene
1. 0 85- 44- 9 1. 0	1535	Phthalic anhydride
86-30-6	1408	N- Ni trosodi phenyl ami ne
1. 0 87-62-7	2016	2, 6- Xyl i di ne
0. 1 87-68-3	0979	Hexachloro-1, 3-butadi ene
1. 0 87-86-5	1473	Pentachlorophenol (PCP)
0. 1 88-06-2 0. 1	1894	2, 4, 6-Tri chl orophenol
88-75-5 1.0	1391	2-Nitrophenol
88-85-7 1.0	2354	Dinitrobutyl phenol (Dinoseb)
88-89-1 1.0	1946	Picric acid
90-04-0 2000 Poloaco and	1421	o-Ani si di ne

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96-12-8

0.1

0595

RTK De minimis CAS Number Number Concentration Substance Name 0. 1 90-43-7 1439 2-Phenyl phenol 1.0 90-94-8 1305 Michler's ketone 0.1 91-08-7 1868 Tol uene-2, 6-di i socyanate 0.1 1322 91-20-3 Naphthal ene 1.0 91-22-5 1628 Qui nol i ne 1. 0 91- 59- 8 1324 beta-Naphthyl ami ne 0.1 91-94-1 0644 3, 3' - Di chl orobenzi di ne 0.1 92-52-4 0795 Bi phenyl 1.0 92-67-1 0072 4-Ami nobi phenyl 0.1 92-87-5 0204 Benzi di ne 0. 1 92-93-3 0229 4-Ni trobi phenyl 0.1 93-65-2 3093 Mecoprop 0.1 94-11-1 2941 2,4-D isopropyl ester 0.1 94-36-0 0215 Benzoyl peroxide 1.0 0199 Di hydrosafrol e 94-58-6 0.1 94-59-7 1642 Safrol e 0.1 94-74-6 3094 Methoxone ((4-Chloro-2-methylphenoxy) acetic acid) (MCPA) 0.1 94-75-7 0593 2, 4-D [Acetic acid, (2, 4-dichloro-phenoxy)-] 0.1 94-80-4 2943 2, 4-D butyl ester 0.1 94-82-6 3271 2, 4-DB 1.0 95-47-6 1.0 2903 o-Xyl ene 95-48-7 1426 o-Cresol 1.0 95-50-1 0642 1, 2-Di chl orobenzene 1.0 95-53-4 1442 o-Tol ui di ne 0.1 95-54-5 1495 1, 2-Phenyl enedi ami ne 1.0 2716 95-63-6 1, 2, 4-Tri methyl benzene 1.0 95-69-2 3657 p-Chloro-o-toluidine 0.1 95-80-7 0613 2, 4-Di ami notol uene 0. 1 95-95-4 1895 2, 4, 5-Tri chl orophenol 1.0 96-09-3 1749 Styrene oxide 0.1

1, 2-Di bromo-3-chl oropropane (DBCP)

	RTK	
De minimi <u>CAS Number</u>	<u>Number</u>	Substance Name
<u>Concentrat</u> 96-18-4	<u>i on</u> 1902	1, 2, 3-Tri chl oropropane
0. 1 96-33-3	1219	Methyl acrylate
1. 0 96- 45- 7	0883	Ethyl ene thi ourea
0. 1 97-23-4	3684	Di chl orophene (2, 2' - Methyl enebi s(4- chl orophenol)
1. 0 97- 56- 3	0507	C.I. Solvent Yellow 3
1. 0 98- 07- 7 0. 1	0212	Benzoic trichloride (Benzotrichloride)
98-82-8 1.0	0542	Cumene
98-86-2 1.0	2961	Acetophenone
98-87-3 1.0	0195	Benzal chlori de
98-88-4 1.0	0214	Benzoyl chlori de
98-95-3	1361	Ni trobenzene
0. 1 99- 30- 9	3671	Di chl oran (2, 6- Di chl oro- 4- ni troani l i ne)
1. 0 99- 55- 8	1444	5-Ni tro-o-tol ui di ne
1. 0 99- 59- 2	1388	5-Ni tro-o-ani si di ne
1. 0 99-65-0	3017	m-Di ni trobenzene
1. 0 100- 01- 6	1548	p-Ni troani l i ne
1. 0 100- 02- 7	1390	4-Nitrophenol
1. 0 100-25-4	3019	p-Di ni trobenzene
1. 0 100- 41- 4	0851	Ethyl benzene
1. 0 100- 42- 5 0. 1	1748	Styrene
100-44-7	0217	Benzyl chloride
1. 0 100- 75- 4	1412	N- Ni trosopi peri di ne
0. 1 101-05-3	3648	Anilazine [4, 6-Dichloro-N-(2-chlorophenyl)-1, 3, 5-triazin-2-amine]
1. 0 101-14-4	1250	4, 4'-Methyl enebis (2-chloroaniline) (MBOCA)
0. 1 101-61-1	1252	4, 4' - Methyl enebi $s(N, N-dimethyl)$ benzenami ne
0. 1 101-77-9 0. 1	1256	4, 4' - Methyl enedi ani l i ne
101-80-4 0.1	0612	4, 4' - Di ami nodi phenyl ether
101-90-6 0. 1	2054	Diglycidyl resorcinol ether
104-12-1 1.0	3656	p-Chlorophenyl isocyanate
104-94-9 1.0	2893	p- Ani si di ne
105-67-9	0764	2, 4- Di methyl phenol
1. 0 106- 42- 3	2904	p- Xyl ene
1. 0 106- 44- 5	1468	p-Cresol
1. 0 106-46-7	0643	1, 4- Di chl orobenzene
0. 1 106-47-8 0. 1	2964	p- Chl oroani l i ne
106-50-3 1.0	1586	p-Phenyl enedi ami ne
106-51-4	1460	Qui none
1. 0 106-88-7	0287	1, 2-Butyl ene oxi de
1. 0 106- 89- 8	0828	Epi chl orohydri n

106-89-8 0828 Epi chl orohydri n 2000 Release and Pollution Prevention Report

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De minimis	RTK	
CAS Number Concentrati	<u>Number</u> on	Substance Name
0. 1 106- 93- 4 0. 1	0877	1, 2-Di bromoethane (Ethyl ene di bromi de)
106-99-0 0.1	0272	1, 3-Butadi ene
107-02-8 1.0	0021	Acrolein
107-05-1 1.0	0039	Allyl chloride
107-06-2 0.1	0652	1, 2-Di chl oroethane (Ethyl ene di chl ori de)
107-11-9 1.0	0037	Al l yl ami ne
107-13-1 0.1	0024	Acrylonitrile
107-18-6 1.0	0036	Allyl alcohol
107-19-7 1.0	1597	Propargyl al cohol
107-21-1 1.0	0878	Ethyl ene glycol
107-30-2 0.1	0391	Chloromethyl methyl ether
108-05-4 0.1	1998	Vinyl acetate
108- 10- 1 1. 0	1268	Methyl isobutyl ketone
108-31-6 1.0	1152	Mal ei c anhydri de
108-38-3 1.0	2902	m- Xyl ene
108-39-4 1.0	1161	m-Cresol
108-45-2 1.0	1316	1, 3- Phenyl enedi ami ne
108-60-1 1.0	0235	Bis(2-chloro-1-methylethyl)ether
108-88-3 1.0	1866	Tol uene
108-90-7 1.0	0379	Chlorobenzene
108-93-0 1.0	0569	Cyclohexanol
108-95-2 1.0	1487	Phenol
109-06-8 1.0	2955	2- Methyl pyri di ne
109-77-3 1.0	1153	Mal ononi tri l e
109-86-4 1.0	1211	2-Methoxyethanol
110-54-3 1.0	1340	n- Hexane
110-57-6 1.0	2829	trans-1, 4-Di chl oro-2-butene
110-80-5 1.0	0839	2-Ethoxyethanol
110-82-7 1.0	0565	Cycl ohexane
110-86-1 1.0	1624	Pyri di ne
111-42-2 1.0	0686	Di ethanol ami ne

De minimis Substance Name <u>CAS Number</u> <u>Number</u> <u>Concentrati</u> 0232 111-44-4 Bis(2-chloroethyl) ether 1.0 111-91-1 2971 Bis(2-chloroethoxy) methane 1.0 114-26-1 1604 Propoxur [Phenol, 2-(1-methylethoxy)-, methylcarbamate] 1.0 1609 115-07-1 Propylene (Propene) 1.0 115-28-6 3228 Chlorendic acid 0.1 115-32-2 0675 Di cofol 1. 0 [Benzenemethanol, 4-chloro-.alpha.-4-(chlorophenyl)-.alpha.-(trichloromethyl)-] 116-06-3 0031 Al di carb 1. 0 117- 79- 3 0069 2-Ami noanthraqui none 0.1 117-81-7 0238 Di (2-ethyl hexyl) phthal ate (DEHP) 0.1 118-74-1 0978 Hexachl orobenzene PRT 119-90-4 0734 3, 3' - Di methoxybenzi di ne 0.1 119-93-7 0742 3, 3' - Dimethyl benzi dine (o-Tolidine) 0.1 120-12-7 0139 Anthracene 1.0 120-36-5 3076 2. 4-DP 0.1 120-58-1 0198 Isosafrole 120-71-8 1467 p-Cresi di ne 0.1 120-80-9 0722 Catechol 1.0 120-82-1 1887 1, 2, 4-Tri chl orobenzene 1.0 120-83-2 2344 2, 4-Di chl orophenol 1.0 121-14-2 0783 2, 4-Dinitrotoluene 0.1 121-44-8 1907 Tri ethyl ami ne 1.0 121-69-7 0741 N, N-Dimethyl aniline 1.0 121-75-5 1150 Mal athi on 1.0 122-34-9 3454 Si mazi ne 1.0 122-39-4 0796 Di phenyl ami ne 1.0 122-66-7 0800 1, 2-Di phenyl hydrazi ne (Hydrazobenzene) 0. 1 123-31-9 1019 Hydroqui none 1.0 123-38-6 1598 Propi onal dehyde 1. 0 123-63-7 1455 Paral dehyde 1.0 0299 123-72-8 Butyral dehyde 1.0 123-91-1 0789 1, 4-Di oxane 0.1 124-40-3 0737 Di methyl ami ne 1.0 124-73-2 3137 Dibromotetrafluoroethane (Halon 2402) 1.0 126-72-7 1957 Tris(2, 3-dibromopropyl) phosphate 0.1 126-98-7 1220 Methacryl oni tri le 1.0 126-99-8 0407 Chl oroprene 1.0 127-18-4 1810 Tetrachloroethylene (Perchloroethylene) 0.1 128-03-0 Potassium dimethyl dithiocarbamate 3735

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2. <u>List by CAS Number</u>

	D	RTK	
	De minimis <u>AS Number</u> Concentratio	<u>Number</u> on	Substance Name
	1. 0 128- 04- 1 1. 0	3740	Sodium dimethyl dithiocarbamate
	128-66-5 1.0	0512	C.I. Vat Yellow 4
	131-11-3 1.0	0765	Dimethyl phthalate
	131-52-2	1712	Sodi um pentachl orophenate
	1. 0 132-27-4 0. 1	3458	Sodi um o-phenyl phenoxi de
	132-64-9	2230	Di benzofuran
	1. 0 133-06-2 1. 0	0339	Captan
3a		rahydro- 2- 3554	[1H-Isoindole-1,3(2H)-dione, [(trichloromethyl)thio]-] Folpet
	133-90-4	0357	Chloramben [Benzoic acid, 3-amino-2, 5-dichloro-]
	1. 0 134-29-2 0. 1	1422	o-Ani si di ne hydrochl ori de
	134-32-7 0.1	1325	al pha-Naphthyl ami ne
	135-20-6 0. 1	0545	Cupferron [Benzeneamine, N-hydroxy-N-nitroso, ammonium salt]
	136-45-8 1.0	3701	Dipropyl isocinchomeronate
	137-26-8 1.0	1854	Thi ram
	137-41-7	3736	Potassi um N-methyl di thi ocarbamate
	1. 0 137- 42- 8	3711	Metham sodium (Sodium methyl dithiocarbamate)
	1. 0 138- 93- 2 1. 0	3702	Di sodi um cyanodi thi oi mi docarbonate
	139-13-9 0.1	1358	Nitrilotriacetic acid
	139-65-1 0.1	1847	4, 4' - Thi odi ani l i ne
	140-88-5 0.1	0843	Ethyl acrylate
	141-32-2 1.0	0278	Butyl acrylate
	142-59-6 1.0	3720	Nabam
	148-79-8 1.0	3746	Thi abendazol e (2-(4-Thi azol yl)-1H-benzi mi dazol e)
	1.0 149-30-4 1.0	3710	2-Mercaptobenzothi azole (MBT)
	150-50-5	3359	Merphos
	1. 0 150- 68- 5	3719	Monuron
	1. 0 151- 56- 4 0. 1	0881	Ethyl enei mi ne (Azi ri di ne)
	156-10-5	1551	p-Ni trosodi phenyl ami ne
	1. 0 156- 62- 7	0316	Cal ci um cyanami de
	1. 0 191-24-2 PBT	2968	Benzo(g, h, l) perylene
	298-00-0 1.0	1283	Methyl parathion
	300-76-5 1.0	0751	Nal ed

, and the second	RTK	
De minimis <u>CAS Number</u>	<u>Number</u>	Substance Name
301-12-2	on 3724	Oxydemeton methyl
1. 0 302-01-2	1006	(S-(2-(Ethyl sulfinyl) ethyl) 0,0-di methyl ester phosphorothioic acid) Hydrazi ne
0. 1 306-83-2	3613	2, 2-Di chl oro-1, 1, 1-tri fl uoroethane (HCFC-123)
1. 0 309-00-2 PBT	0033	Al dri n
314-40-9 1.0	0251	[1,4;5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha.,4.alpha.,4a.beta.,5.alpha.,8.alpha.,8a.beta.)-] Bromaci l
319-84-6	0566	(5-Bromo- 6-methyl - 3- (1-methyl propyl) - 2, 4- (1H, 3H) - pyri mi di nedi one) al pha-Hexachl orocycl ohexane
1. 0 330- 54- 1	0819	Di uron
1. 0 330- 55- 2	3352	Linuron
1. 0 333- 41- 5	0618	Di azi non
1. 0 334- 88- 3	0620	Di azomethane
1. 0		
353-59-3 1.0	0384	Bromochlorodifluoromethane (Halon 1211)
354-11-0 1.0	3742	1, 1, 1, 2-Tetrachloro-2-fluoroethane (HCFC-121a)
354-14-3 1.0	3743	1, 1, 2, 2-Tetrachloro-1-fluoroethane (HCFC-121)
354-23-4 1. 0	3612	1, 2-Dichloro-1, 1, 2-trifluoroethane (HCFC-123a)
354-25-6 1.0	3606	1-Chloro-1, 1, 2, 2-tetrafluoroethane (HCFC-124a)
357-57-3	0270	Bruci ne
1. 0 422-44-6	3674	1, 2-Di chl oro-1, 1, 2, 3, 3-pentafluoropropane (HCFC-225bb)
1. 0 422-48-0	3675	2, 3-Di chl oro-1, 1, 1, 2, 3-pentafl uoropropane (HCFC-225ba)
1. 0 422-56-0	3676	3, 3-Di chl oro-1, 1, 1, 2, 2-pentafl uoropropane (HCFC-225ca)
1. 0 431-86-7 1. 0	3677	1, 2-Di chl oro-1, 1, 3, 3, 3-pentafl uoropropane (HCFC-225da)
460-35-5	3659	3-Chloro-1, 1, 1-trifluoropropane (HCFC-253fb)
1. 0 463- 58- 1	0349	Carbonyl sulfide
1. 0 465- 73- 6	2499	Isodrin
PBT 492-80-8	2894	C. I. Solvent Yellow 34 (Auramine)
0. 1 505-60-2	1319	Mustard gas [Ethane, 1,1'-thiobis[2-chloro-]
0. 1 507- 55- 1	3678	1, 3- Di chl oro- 1, 1, 2, 2, 3- pentafl uoropropane (HCFC- 225cb)
1. 0 510- 15- 6	0205	Chlorobenzilate [Benzeneacetic acid, 4-chloroalpha(4-chlorophenyl)-
1. 0 528- 29- 0	3018	. al pha hydroxy-, ethyl ester] o- Di ni trobenzene
1. 0 532-27-4	0048	2- Chl oroacetophenone
1. 0 533- 74- 4 1. 0	3664	Dazomet (Tetrahydro-3, 5-di methyl-2H-1, 3, 5-thi adi azi ne-2-thi one)
534-52-1	0779	4, 6-Dinitro-o-cresol
1. 0 540- 59- 0	0653	1, 2-Di chl oroethyl ene
1.0 541-41-3	0865	Ethyl chloroformate
1. 0 541- 53- 7	2368	2, 4- Di thi obi uret
1. 0 541- 73- 1	2301	1, 3-Di chl orobenzene
1. 0 542-75-6 0. 1	0666	1, 3- Di chl oropropyl ene

De minimis	RTK	
CAS Number Concentrati	<u>Number</u>	Substance Name
542-76-7	2711	3-Chl oropropi oni tri l e
$egin{array}{c} 1.\ 0 \ 542-88-1 \ 0.\ 1 \end{array}$	0234	Bis(chloromethyl) ether
554-13-2 1.0	1124	Lithium carbonate
556-61-6 1.0	1272	Methyl isothiocyanate (Isothiocyanatomethane)
563-47-3 0.1	1223	3-Chloro-2-methyl-1-propene
569-64-2 1.0	0448	C. I. Basic Green 4
584-84-9	1869	Tol uene- 2, 4- di i socyanate
0. 1 593-60-2	1999	Vi nyl bromi de
0. 1 594- 42- 3 1. 0	1480	Perchloromethyl mercaptan
606-20-2	0784	2, 6- Di ni trotol uene
0. 1 608- 93- 5	3417	Pentachl orobenzene
PBT 612-82-8	3695	3, 3' - Di methyl benzi di ne di hydrochl ori de (o-Tol i di ne di hydrochl ori de)
0. 1 612-83-9	3267	3, 3' - Di chl orobenzi di ne di hydrochl ori de
0. 1 615-05-4 0. 1	0611	2, 4- Di ami noani sol e
615-28-1 1.0	3728	1, 2-Phenyl enedi ami ne di hydrochl ori de
621-64-7 0. 1	1407	N- Ni trosodi - n- propyl ami ne
624-18-0 1.0	3729	1, 4-Phenyl enedi ami ne di hydrochl ori de
624-83-9 1.0	1270	Methyl isocyanate
630-20-6 1. 0	2992	1, 1, 1, 2-Tetrachl oroethane
636-21-5 0.1	1443	o-Tol ui di ne hydrochl ori de
639- 58- 7 1. 0	1952	Triphenyltin chloride
680-31-9 0.1	0973	Hexamethyl phosphorami de
684-93-5	1411	N-Nitroso-N-methylurea
0. 1 709- 98- 8 1. 0	3439	Propani l (N-(3, 4-Di chl orophenyl) propanami de)
759-73-9	1410	N- Ni troso- N- ethyl urea
0. 1 759- 94- 4	3300	Ethyl dipropylthiocarbamate (EPTC)
1. 0 764- 41- 0	3070	1, 4-Di chl oro-2-butene
1. 0 812-04-4	3611	1, 1-Dichloro-1, 2, 2-trifluoroethane (HCFC-123b)
1. 0 834-12-8	3150	Ametryn
1. 0		(N-Ethyl-N'-(1-methylethyl)-6-(methylthio)-1, 3, 5, -triazine-2, 4-diamine)

D	RTK	
De minimis CAS Number	<u>Number</u>	Substance Name
Concentration 842-07-9	0509	C.I. Solvent Yellow 14
1. 0 872-50-4	3716	N-Methyl - 2-pyrrol i done
1. 0 924-16-3	1406	N- Ni trosodi - n- butyl ami ne
0. 1 924-42-5 1. 0	3715	N-Methyl ol acryl ami de
957-51-7 1.0	3290	Di phenami d
961-11-5 1.0	1813	Tetrachl orvi nphos
ester]		$[\ Phosphori c aci d, \ 2\text{-} chl oro\text{-} 1\text{-} (2, 3, 5\text{-} tri chl orophenyl) ethenyl di methyl$
989-38-8 1.0	0449	C.I. Basic Red 1
1114-71-2 1.0	3725	Pebulate (Butylethylcarbamothioic acid S-propyl ester)
1120-71-4 0. 1	1446	Propane sultone
1134-23-2 1.0	3662	Cycloate
1163-19-5 1.0	0598	Decabromodi phenyl oxi de
1313-27-5 1.0	1312	Molybdenum trioxide
1314-20-1 1.0	1856	Thori um di oxi de
1319-77-3 1.0	0537	Cresol (mixed isomers)
1320-18-9 0.1	2944	2, 4-D propylene glycol butyl ether ester
1330-20-7 1.0	2014	Xylene (mixed isomers)
1332-21-4 0.1	0164	Asbestos (friable)
1335-87-1 1.0	0982	Hexachl oronaphthal ene
1336-36-3 PBT	1554	Polychlorinated biphenyls (PCBs)
1344-28-1 1.0	2891	Aluminum oxide (fibrous form)
1464-53-5 0.1	0685	Di epoxybutane
1563-66-2 1.0	0341	Carbofuran
1582-09-8	N- di propy 1293	1918 Trifluralin [Benezeneamine, yl-4-(trifluoromethyl)-] PBT Methyl tert-butyl ether
1649-08-7 1.0	3673	1, 2-Dichloro-1, 1-difluoroethane (HCFC-132b)
1689-84-5 1.0	3211	Bromoxynil (3, 5-Dibromo-4-hydroxybenzonitrile)
1689-99-2 1.0	3212	Bromoxynil octanoate (Octanoic acid, 2,6-dibromo-4-cyanophenyl ester)
1717-00-6 1.0	3270	1, 1-Dichloro-1-fluoroethane (HCFC-141b)
1836-75-5 0.1	1374	Nitrofen [Benzene, 2, 4-dichloro-1-(4-nitrophenoxy)-]
1861-40-1 1.0	3181	Benfluralin
1. 0		(N-Butyl-N-ethyl-2, 6-dinitro-4-(trifluoromethyl) benzenamine)
1897-45-6 1.0	0415	Chlorothalonil [1, 3-Benzenedicarbonitrile, 2, 4, 5, 6-tetrachloro-]
1910- 42- 5 1. 0	1458	Paraquat dichloride
1912-24-9 1.0	0171	Atrazine
1918- 00- 9 1. 0	0634	(6-Chloro-N-ethyl-N'-(1-methylethyl)-1, 3, 5-tri azi ne-2, 4-di ami ne) Di camba (3, 6-Di chloro-2-methyoxybenzoi cacid)
1918-02-1 1.0	1536	Picloram
1918- 16- 7 1. 0	3438	Propachlor (2-Chloro-N-(1-methylethyl)-N-phenylacetamide)
1928-43-4 2000 Release and	3667 I Pollution Pi	2, 4-D 2-ethylhexyl ester revention Report B-33

	RTK	
De minimis CAS Number	Number	Substance Name
Concentrati		
0. 1 1929- 73- 3 0. 1	2949	2, 4-D butoxyethyl ester
1929-82-4 1.0	1355	Nitrapyrin (2-Chloro-6-(trichloromethyl)pyridine)
1937-37-7 0. 1	0453	C.I. Direct Black 38
1982-69-0 1.0	3739	Sodium dicamba (3,6-Dichloro-2-methoxybenzoic acid, sodium salt)
1983-10-4 1. 0	3750	Tributyltin fluoride
2032-65-7 1.0	1165	Methiocarb
2155-70-6 1.0	3751	Tributyltin methacrylate
2164-07-0 1.0	3700	Dipotassium endothall
2164-17-2 1.0	0935	(7-0xabicyclo(2.2.1)heptane-2,3-dicarboxylic acid, dipotassium salt) Fluometuron [Urea, N,N-dimethyl-N'-[3-(trifluoromethyl)phenyl]-]
2212-67-1 1.0	3718	Molinate (1H-Azepine-1 carbothioic acid, hexahydro-S-ethyl ester)
2234-13-1 1.0	1427	Octachl oronaphthal ene
2300-66-5 1.0	3694	Dimethylamine dicamba
2303-16-4 1.0	0608	Diallate
1.0		[Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2-propenyl)ester]
2303-17-5 1.0	3474	Triallate
2312-35-8 1.0	1596	Propargite
2439-01-2 1.0	3654	Chi nomethi onat (6-Methyl-1, 3-dithi olo[4, 5-b]qui noxal i n-2-one)
2439-10-3 1.0	3579	Dodine (Dodecyl guani dine monoacetate)
2524-03-0 1.0	0770	Di methyl chlorothi ophosphate
2602-46-2 0.1	0462	C. I. Direct Blue 6
2655-15-4 1.0	3756	2, 3, 5-Tri methyl phenyl methyl carbamate
2699-79-8 1.0	1769	Sulfuryl fluoride (Vikane)
2702-72-9 0. 1	3297	2, 4-D sodium salt
2832-40-8 1.0	0503	C. I. Disperse Yellow 3
2837-89-0 1.0	3607	2-Chloro-1, 1, 1, 2-tetrafluoroethane (HCFC-124)
2971-38-2 0.1	2947	2, 4-D chlorocrotyl ester
3118-97-6 1.0	0506	C. I. Solvent Orange 7
3383-96-8 1.0	1780	Temephos
3653-48-3 0.1	3713	Methoxone sodium salt ((4-Chloro-2-methylphenoxy) acetate sodium salt)
3761-53-3 0.1	0504	C. I. Food Red 5
4080-31-3 1.0	3655	1-(3-Chloroallyl)-3, 5, 7-tri aza-1-azoni aadamantane chlori de
4170-30-3 1.0	2888	Crotonal dehyde

ъ	RTK	
De minimis <u>CAS Number</u>	<u>Number</u>	Substance Name
<u>Concentrati</u> 4549-40-0	<u>on</u> 2907	N- Ni trosomethyl vi nyl ami ne
0. 1 4680- 78- 8	0442	C. I. Acid Green 3
1. 0 5234-68-4	3224	Carboxi n (5, 6- Di hydro- 2- methyl - N- phenyl - 1, 4- oxathi i n- 3- carboxami de)
1. 0 5598-13-0 1. 0	3660	Chlorpyri fos methyl
5902-51-2 1.0	3466	(0, 0- Di methyl - 0- (3, 5, 6- tri chl oro- 2- pyri dyl) phosphorothi oate) Terbaci l
6459-94-5 0.1	0445	(5-Chloro-3-(1, 1-dimethylethyl)-6-methyl-2, 4 (1H, 3H)-pyrimidinedione) C. I. Acid Red 114
7287-19-6 1.0	3437	Prometryn
7429-90-5 1.0	0054	(N, N' - Bi s (1- methyl ethyl) - 6- methyl thi o- 1, 3, 5- tri azi ne- 2, 4- di ami ne) Al umi num (fume or dust)
7439-92-1	1096	Lead
0. 1 7439- 96- 5 1. 0	1155	Manganese
7439-97-6	1183	Mercury
PBT 7440- 02- 0	1341	Ni ckel
0. 1 7440-22-4	1669	Silver
$ \begin{array}{c} 1.0 \\ 7440 - 28 - 0 \end{array} $	1840	Thallium
$ \begin{array}{c} 1.0 \\ 7440 - 36 - 0 \end{array} $	0141	Antimony
$ \begin{array}{c} 1.0 \\ 7440 - 38 - 2 \end{array} $	0152	Arseni c
0. 1 7440- 39- 3	0180	Bari um
1. 0 7440- 41- 7	0222	Beryllium
0. 1 7440- 43- 9	0305	Cadmi um
0. 1 7440- 47- 3 1. 0	0432	Chromi um
7440-48-4	0520	Cobalt
0. 1 7440- 50- 8	0528	Copper
1. 0 7440- 62- 2	3762	Vanadium (except when contained in an alloy)
1. 0 7440- 66- 6	2021	Zinc (fume or dust)
1. 0 7550- 45- 0	1864	Ti tani um tetrachl ori de
1. 0 7632-00-0	2258	Sodium nitrite
1. 0 7637- 07- 2	0246	Boron trifluoride
1. 0 7647- 01- 0 1. 0	1012	Hydrochloric acid (acid aerosols including mists, vapors, gas, fog,
7664-39-3 1.0	1014	and other airborne species of any particle size) Hydrogen fluoride
7664-41-7	0084	Ammonia (includes anhydrous ammonia and aqueous ammonia from water
1. 0		dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing)
7664-93-9 1.0	1761	Sulfuric acid (acid aerosols including mists, vapors, gas, fog,
7696-12-0 1.0	3745	and other airborne species of any particle size) Tetramethrin (2, 2-Dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylic
7697-37-2	1356	acid (1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester) Nitric acid
1. 0 7723- 14- 0	1520	Phosphorus (yellow or white)
1. 0 7726- 95- 6	0252	Bromi ne

7726-95-6 0252 Bromine 2000 Release and Pollution Prevention Report

2. <u>List by CAS Number</u>

D • • •	RTK	
De minimis <u>CAS Number</u> Concentrati	Number	Substance Name
1. 0 7758- 01- 2	1559	Potassium bromate
0. 1 7782-41-4	0937	Fluorine
1. 0 7782-49-2	1648	Sel eni um
1. 0 7782-50-5 1. 0	0367	Chlorine
7786-34-7 1.0	3507	Mevi nphos
7803-51-2 1.0	1514	Phosphi ne
8001-35-2 PBT	1871	Toxaphene
8001 - 58 - 9 0. 1	0517	Creosote
9006-42-2 1.0	3717	Metiram
10028-15-6 1.0	1451	0zone
10034-93-2 0.1	2360	Hydrazine sulfate
10049- 04- 4 1. 0	0368	Chlorine dioxide
10061-02-6 0.1	3685	trans-1, 3-Di chl oropropene
10294-34-5 1.0	0245	Boron trichloride
10453-86-8	3450	Resmethrin ([5-(Phenylmethyl)-3-furanyl]methyl 2, 2-dimethyl-3-
1. 0		(2-methyl-1-propenyl)cyclopropanecarboxylate])
12122-67-7 1.0	2045	Zineb [Carbamodithioic acid, 1,2-ethanediylbis-, zinc complex]
12427-38-2	1154	Maneb [Carbamodithioic acid, 1,2-ethanediylbis-, manganese complex]
1. 0 13194- 48- 4	2395	Ethoprop (Phosphorodithioic acid 0-ethyl S, S-dipropyl ester)
1. 0 13356- 08- 6	3704	Fenbutatin oxide (Hexakis(2-methyl-2-phenylpropyl)distannoxane)
1. 0 13463- 40- 6	1037	Iron pentacarbonyl
1. 0 13474- 88- 9	3679	1, 1-Di chl oro-1, 2, 2, 3, 3-pentafl uoropropane (HCFC-225cc)
1. 0 13684- 56- 5	3666	Desmedi pham
1. 0 14484- 64- 1	0917	$Ferbam\ (Tris (dimethyl carbamodi thi oato- S, S') i ron)$
1. 0 15972-60-8	3143	Alachlor
1. 0 16071-86-6 0. 1	0478	C.I. Direct Brown 95

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De minimis		
CAS Number Concentrati	<u>Number</u> ion	Substance Name
16543-55-8 0.1	2900	N-Ni trosonorni coti ne
17804-35-2 1.0	0192	Benomyl
19044-88-3 1.0	3409	Oryzalin (4- (Dipropylamino) - 3, 5- dinitrobenzenesul fonamide)
19666-30-9 1.0	3410	Oxydi azon (3-[2, 4-Di chl oro-5-(1-methyl ethoxy) phenyl]-5-
20325-40-0	3692	(1, 1-dimethylethyl)-1, 3, 4-oxadiazol-2(3H)-one) 3, 3'-Dimethoxybenzidine dihydrochloride (o-Dianisidine dihydrochloride)
0. 1 20354-26-1 1. 0	3712	Methazole (2-(3, 4-Dichlorophenyl)-4-methyl-1, 2, 4-oxadi azoli di ne-3, 5-di
20816-12-0	1441	one) Osmi um tetroxi de
1. 0 20859- 73- 8	0063	Al umi num phosphi de
1. 0 21087-64-5	1302	Metri buzi n
1. 0 21725-46-2 1. 0	0240	Cyanazi ne
22781-23-3	0191	Bendiocarb [2, 2-Dimethyl-1, 3-benzodioxol-4-ol methylcarbamate]
1. 0 23564- 05- 8	3473	Thi ophanate- methyl
1. 0 23564- 06- 9	3748	Thi ophanate ethyl
1. 0		$\hbox{\tt ([1,2-Phenylenebis\ (iminocarbonothioyl)]}\ biscarbamic\ acid\ diethyl\ ester)\\$
23950-58-5	1592	Pronami de
1. 0 25311-71-1 1. 0	3709	Isofenphos (2-[[Ethoxyl[(1-methylethyl)amino]phosphinothioyl]oxy]
25321-14-6 1.0	2985	benzoic acid 1-methylethyl ester) Dinitrotoluene (mixed isomers)
25321-22-6	2321	Dichlorobenzene (mixed isomers)
0. 1 25376- 45- 8	2134	Diaminotoluene (mixed isomers)
0. 1 26002-80-2 1. 0	3727	$Phenothrin \hbox{$(2,2$-Di methyl-3-(2-methyl-1-propenyl) cycl opropanecarboxylic}$
26471-62-5 0. 1	3132	acid (3-phenoxyphenyl) methyl ester) Toluene diisocyanate (mixed isomers)
26628-22-8	1684	Sodi um azi de
1. 0 26644- 46- 2	3753	Triforine
1. 0 27314-13-2 1. 0	3405	(N, N' - [1, 4- Pi perazi nedi yl bi s(2, 2, 2- tri chl oroethyl i dene)] bi sformami de) Norfl urazon
(4-Chl oro-5-6 28057-48-9 1.0	(methyl ami 3647	no)-2-[3-(trifluoromethyl)phenyl]-3(2H)-pyridazinone)d-trans-Allethrin [d-trans-Chrysanthemic acid of d-allethrone]
28249-77-6	3472	Thiobencarb (Carbamic acid, diethylthio-, S-(p-chlorobenzyl))
1. 0 28407- 37- 6	3661	C. I. Direct Blue 218
1. 0 29082- 74- 4	3761	Octachl orostyrene
PBT 29232-93-7 1.0	3430	Pirimiphos methyl
phosphorothi o	nata)	(0 - (2 - (Diethyl amino) - 6 - methyl - 4 - pyrimidinyl) - 0, 0 - dimethyl
30560-19-1 1.0	3140	Acephate (Acetyl phosphorami dothi oic acid 0, S-di methyl ester)
31218-83-4 1.0	3738	Propetamphos (3-[(Ethyl ami no) methoxyphosphi nothi oyl]oxy]-2-
1. 0		butenoic acid, 1-methylethyl ester)
33089-61-1 1.0	3156	Ami traz
34014-18-1 1.0	3464	Tebuthi uron
	nd Pollution F	(N-[5-(1, 1-Dimethylethyl)-1, 3, 4-thi adi azol-2-yl)-N, N'-dimethylurea) Prevention Report B-37

2. <u>List by CAS Number</u>

RTK

De minimis	KIK	
CAS Number Concentrati	<u>Number</u>	Substance Name
3 4077-87-7 1.0	3608	Di chl orotri fl uoroethane
35367-38-5 1.0	3276	Di fl ubenzuron
35400-43-2	1771	Sulprofos
1. 0		(0-Ethyl 0-[4-(methylthio)phenyl]phosphorodithioic acid S-propyl ester)
35554-44-0	3343	I mazalil (1-[2-(2, 4-Dichlorophenyl)-2-(2-propenyloxy)ethyl]-1H-i mi dazole)
1. 0 35691-65-7	3652	1-Bromo-1-(bromomethyl)-1, 3-propanedi carboni trile
1. 0 38727-55-8	3687	Diethatyl ethyl
1. 0 39156- 41- 7	2899	2, 4-Diaminoanisole sulfate
0. 1 39300- 45- 3	3699	Di nocap
1. 0		
39515-41-8 1.0	3253	Fenpropathrin (2, 2, 3, 3-Tetramethylcyclopropane carboxylic acid
40487-42-1 PBT	3415	cyano(3-phenoxyphenyl) methyl ester) Pendi methalin (N-(1-Ethyl propyl)-3, 4-di methyl-2, 6-di ni trobenzenami ne)
41198-08-7 1.0	3737	Profenofos (0-(4-Bromo-2-chlorophenyl)-0-ethyl-S-propyl phosphorothioate)
41766-75-0	3696	$3,3'\hbox{-}\text{Dimethylbenzidine}\text{dihydrofluoride}\text{(o-Tolidine}\text{dihydrofluoride)}$
0. 1 42874- 03- 3	3411	0xyfluorfen
1. 0 43121-43-3	3179	Tri adi mefon
1. 0 50471-44-8	3494	(1- (4-Chl orophenoxy) - 3, 3-di methyl - 1- (1H-1, 2, 4-tri azol - 1-yl) - 2-butanone) Vi ncl ozol i n
1. 0 51235-04-2	3339	(3- (3, 5-Di chl orophenyl) - 5- ethenyl - 5- methyl - 2, 4- oxazol i di nedi one) Hexazi none
1. 0 51338- 27- 3	3686	Diclofop methyl
1. 0 51630- 58- 1 1. 0	3134	(2-[4-(2,4-Dichlorophenoxy) phenoxy]propanoic acid, methyl ester) Fenvalerate (4-Chloro-alpha-(1-methylethyl)benzeneacetic acid
1. 0		cyano(3-phenoxyphenyl) methyl ester)
52645-53-1	3422	Permethrin (3-(2, 2-Dichloroethenyl)-2, 2-dimethyl cyclopropane
1. 0 53404-19-6 1. 0	3651	carboxylic acid, (3-phenoxyphenyl) methyl ester) Bromacil, lithium salt (2,4-(1H,3H)-Pyrimidinedione, 5-bromo-6-methyl-3
53404-37-8 0.1	3668	(1-methylpropyl), lithium salt) 2,4-D 2-ethyl-4-methylpentyl ester
53404-60-7	3665	Dazomet, sodium salt
1. 0		(Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione, ion(1-), sodium)
55290-64-7 1.0	3278	$ \label{lem:distance} \textbf{Dimethipin} \ \ \textbf{(2, 3, -Dihydro-5, 6-dimethyl-1, 4-dithiin} \ \ \textbf{1, 1, 4, 4-tetraoxide)} $

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RTK
     De minimis
  CAS Number
                           Number
                                             Substance Name
    <u>Concentrati</u>
                         on
  55406-53-6
                           3708
                                             3-Iodo-2-propynyl butylcarbamate
             1.0
  57213-69-1
                           3752
                                             Triclopyr triethylammonium salt
              1.0
                           3747
  59669-26-0
                                             Thi odi carb
              1 0
                           3703
  60168-88-9
                                             Fenari mol
              1.0
                                             (. al pha. - (2-Chl orophenyl) - . al pha. - 4-chl orophenyl) - 5-pyri mi di nemethanol)
  60207-90-1
                            3442
                                             Propi conazol e (1-[2-(2, 4-Di chl orophenyl)-4-propyl-1, 3-di oxol an-2-yl]-
             1.0
                                             methyl - 1H- 1, 2, 4, - tri azol e)
  62476-59-9
                           3455
                                             Acifluorfen, sodium salt
             1.0
                                             [5-(2-Chl oro-4-(tri fl uoromethyl) phenoxy)-2-ni trobenzoi c
                                                                                                                                                                aci d,
                                                                                                                                                                                 sodi um
saltl
 63938-10-3
                           0414
                                             Chl orotetrafl uoroethane
             1.0
  64902-72-3
                           3574
                                             Chl orsul furon
                                                                        (2-Chloro-N-[[(4-methoxy-6-methyl-1, 3, 5-triazin-2-yl)
             1.0
                                             ami no] carbonyl] benzenesul fonami de)
  64969-34-2
                           3672
                                             3, 3' - Di chl or obenzi di ne sul fate
             0.1
                           3705
  66441-23-4
                                             Fenoxaprop ethyl
              1.0
                                             (2-(4-((6-Chl oro-2-benzoxazol yl en) oxy) phenoxy) propanoi c
                                                                                                                                                                 aci d,
                                                                                                                                                                                   ethyl
ester)
  67485-29-4
                           3149
                                             Hydramethyl non
(Tetrahydro-5,5-dimethyl-2(1H)-pyrimidinone[3-[4-(trifluoromethyl)phenyl]-1-[2-[4-(trifluoromethyl)phenyl]-2-propenylidene]hydrazone)\\68085-85-8 \quad 3248 \qquad Cyhalothrin \quad (3-(2-Chloro-3,3,3-trifluoro-1-propenyl)-2,2-Dimethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomethylcyclomet
             1.0
                                             propanecarboxylic acid cyano(3-phenoxyphenyl) methyl ester)
Cyfluthrin (3-(2,2-Dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic
  68359-37-5
                            3180
              1.0
                                             acid, cyano(4-fluoro-3-phenoxyphenyl) methyl ester)
  69409-94-5
                           3310
                                                                     (N-[2-Chloro-4-(trifluoromethyl)phenyl]-DL-valine
             1.0
                                             (+)-cyano(3-phenoxyphenyl)methyl ester)
Fluazifop butyl (2-[4-[[5-(Trifluoromethyl)-2-pyridinyl]oxy]-phenoxy]
                            3707
                                             Fluazifop butyl
  69806-50-4
             1.0
                                             propanoic acid, butyl ester)
  71751-41-2
                           3175
                                             Abamectin [Avermectin B1]
              1.0
  72178-02-0
                           3312
                                             Fomesafen
              1.0
                                             (5-(2-Chloro-4-(trifluoromethyl)phenoxy)-N
methyl sul fonyl) - 2- ni trobenzami de)
 72490-01-8
                           3706
                                             Fenoxycarb (2-(4-Phenoxy-phenoxy)-ethyl]carbamic acid ethyl ester)
             1.0
  74051-80-2
                           3453
                                             Sethoxydim (2-[1-(Ethoxyimino) butyl]-5-[2-(ethylthio)propyl]-
             1.0
                                             3- hydroxyl - 2- cycl ohexen- 1- one)
  76578-14-8
                           3173
                                             Qui zal of op-ethyl
             1.0
                                             (2-[4-[(6-Chloro-2-quinoxalinyl)oxy]phenoxy] propanoic acid ethyl ester)
 77501-63-4
                           3550
                                             Lactofen (5-(2-Chloro-4-(trifluoromethyl)phenoxy)-2-nitro-2-
              1.0
                                             ethoxy-1-methyl-2-oxoethyl ester)
  82657-04-3
                           3194
                                             Bi fenthri n
             1.0
  88671-89-0
                           3462
                                             Mycl obutani l
             1.0
(. al pha. - Butyl - . al pha. - (4-chl orophenyl) - 1H- 1, 2, 4-tri azol e- 1-propaneni tri l e)
  90454-18-5
                           3609
                                             Di chl oro-1, 1, 2-tri fl uoroethane
              1.0
 90982-32-4
                           3229
                                             Chlori muron ethyl (Ethyl-2-[[[(4-chloro-6-methoxypri mi din-2-yl)-
              1.0
                                             carbonyl]-ami no]sul fonyl]benzoate)
101200-48-0
                           3749
                                                                                 (2-(4-Methoxy-6-methyl-1, 3, 5-triazin-2-yl)-
                                             Tribenuron methyl
             1.0
                                             methylamino)carbonyl)amino)sulfonyl)-, methyl ester)
                           3680
111512-56-2
                                             1, 1-Di chl oro-1, 2, 3, 3, 3-pentafl uoropropane (HCFC-225eb)
              1.0
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2. <u>List by CAS Number</u>

	RTK	
De minimis		
CAS Number	<u>Number</u>	Substance Name
Concentrati	on	
111984-09-9	3693	3, 3' - Di methoxybenzi di ne hydrochl ori de (o-Di ani si di ne hydrochl ori de)
0. 1		
127564-92-5	3681	Di chl oropentafl uoropropane
1. 0		The state of the s
128903-21-9	3682	2, 2-Di chl oro-1, 1, 1, 3, 3-pentafl uoropropane (HCFC-225aa)
1. 0		a, a compared to the process of the
136013-79-1	3683	1, 3-Dichloro-1, 1, 2, 3, 3-pentafluoropropane (HCFC-225ea)
1. 0	0000	1, 0 21 en 101 0 1, 1, 2, 0, 0 pendari acropi opuno (noro anoca)
1.0		

 $PBT = newly\ listed\ and/or\ newly\ regulated\ at\ a\ lower\ persistent,\ bioaccumulative\ and\ toxic\ substance\ threshold.$

APPENDIX C

EPCRA SECTION 313 TOXIC CHEMICAL LIST

CHEMICAL CATEGORIES

In addition to the specific substances listed in APPENDIX B, the following chemical categories are required to be reported when the manufacture, process or otherwise use thresholds are exceeded. However, threshold determinations must be made separately for each of the three activities. Reporting is required pursuant to the New Jersey Worker and Community Right to Know Act (N.J.S.A. 34:5A-1.1 et seq.).

When reporting for any of the chemical categories, all individual members of a category that are manufactured, processed, or otherwise used must be counted. The metal compounds listed below, unless otherwise specified, are defined as including any unique chemical substance that contains the named metal (i.e. antimony, arsenic, etc.) as part of that chemical's structure. Threshold determinations for metal-containing compounds are based on the total weight of all compounds manufactured, processed or otherwise used. However, once an activity threshold is exceeded, report only the quantities of the parent metal.

For the category "nitrate compounds (water dissociable; reportable only when in aqueous solution)," the entire weight of the nitrate compounds is counted towards the threshold. This listing covers a nitrate compound only when in water and only if dissociated. If no information is available on the identity of the type of nitrate this is manufactured, processed or otherwise used, assume that the nitrate compound exists as sodium nitrate.

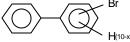
Chemical categories are subject to the 1.0 percent de minimis concentration unless the substance involved meets the definition of an OSHA carcinogen. OSHA carcinogens are subject to the 0.1 percent de minimis concentration. The de minimis concentration for each category is provided in parentheses.

Category ¹ <u>Code</u>	RTK <u>Number</u>	Chemical Category Name (de minimis concentration)		
N010	2223	Antimony Compounds (1.0)		
N020	2138	Arsenic Compounds (inorganic compounds: 0.1; organic compounds: 1.0)		
N040	2146	Barium Compounds (1.0) (excludes Barium sulfate CAS# 7727-43-7)		
N050	2163	Beryllium Compounds (0.1)		
N078	2199	Cadmium Compounds (0.1)		
N084	2976	Chlorophenols (0.1) OH Clx $Where x = 1 \text{ to } 5$		
N090	2245	Chromium Compounds (chromium VI compounds: 0.1; chromium III compounds: 1.0)		
N096	2222	Cobalt Compounds (0.1)		
N100	2215	Copper Compounds (1.0) (excludes C.I. Pigment Blue 15, C.I. Pigment Green 7, C.I. Pigment Green 36, and all copper phthalocyanine compounds substituted with only hydrogen and/or bromine and/or chlorine)		
N106	2308	Cyanide Compounds (1.0) $X^{\dagger}CN^{\dagger}$ where $X = H^{\dagger}$ or any other group where a formal dissociation may occur. (continued)		

2000 Release and Pollution Prevention Report

Category ¹ <u>Code</u>	RTK <u>Number</u>	Chemical Category Name (de minimis concentration)	
N120	3757	Diisocyanates (1.0) This category includes only those listed below: 1,3-Bis (methylisocyanate) cyclohexane 1,4-Bis (methylisocyanate) cyclohexane 1,4-Cyclohexane diisocyanate Diethyldiisocyanatobenzene 4,4'-Diisocyanatodiphenyl ether 2,4'-Diisocyanatodiphenyl sulfide 3,3'-Dimethoxybenzidine-4,4'-diisocyanate 3,3'-Dimethyl-4,4'-diphenylene diisocyanate 3,3'-Dimethyldiphenylmethane-4,4'-diisocyanate Hexamethylene-1,6-diisocyanate Isophorone diisocyanate 4-Methyldiphenylmethane-3,4-diisocyanate 1,1-Methylene bis (4-isocyanatocyclohexane) Methylenebis (phenylisocyanate 1,3-Phenylene diisocyanate 1,3-Phenylene diisocyanate 1,4-Phenylene diisocyanate 2,2,4-Trimethylhexamethylene diisocyanate 2,4,4-Trimethylhexamethylene diisocyanate	38661-72-2 10347-54-3 2556-36-7 134190-37-7 4128-73-8 75790-87-3 91-93-0 91-97-4 139-25-3 822-06-0 4098-71-9 75790-84-0 5124-30-1 101-68-8 3173-72-6 123-61-5 104-49-4 9016-87-9 16938-22-0 15646-96-5
N150	3760	Dioxin and Dioxin-like Compounds (manufacturing; and dioxin and dioxin-like compounds if the dioxin and contaminants in a chemical and if they were created durity (PBT) This category includes only the 17 listed chemicals below 1,2,3,4,6,7,8-Heptachlorodibenzofuran 1,2,3,4,7,8,9-Heptachlorodibenzofuran 1,2,3,4,7,8-Hexachlorodibenzofuran 1,2,3,7,8,9-Hexachlorodibenzofuran 2,3,4,6,7,8-Hexachlorodibenzofuran 1,2,3,4,7,8-Hexachlorodibenzofuran 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin 1,2,3,4,6,7,8-Pentachlorodibenzofuran 1,2,3,4,6,7,8,9-Octachlorodibenzofuran 1,2,3,7,8-Pentachlorodibenzofuran 2,3,4,7,8-Pentachlorodibenzofuran 2,3,7,8-Pentachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-Tetrachlorodibenzo-p-dioxin	dioxin-like compounds are present as ng the manufacturing of that chemical)
N171	3614	Ethylenebisdithiocarbamic acid, salts and esters (EBDCs	s) (1.0)
N230	3138	Glycol Ethers (1.0) (excludes surfactant glycol ethers) consists of those glycol ethers that meet the following de R-(OCH ₂ CH ₂) _n -OR' where n = 1,2, or 3; R = alkyl C7 or less; or R = phenyl or alkyl substituted phenyl; R' = H or alkyl C7 or less; or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.	efinition:

Category ¹ <u>Code</u>	RTK <u>Number</u>	Chemical Category Name (de minimis concentration)		
N420	2266	Lead Compounds (inorganic compounds: 0.1; organic compounds: 1.0)		
N450	2324	Manganese Compounds (1.0)		
N458	2414	Mercury Compounds (PBT)		
N495	2366	Nickel Compounds (0.1)		
N503	2583	Nicotine and salts (1.0)		
N511	3722	Nitrate compounds (water dissociable; reportable only when in aqueous solution) (1.0)		
N575	1552	Polybrominated Biphenyls (PBBs) (0.1)		
		Br		



Where x = 1 to 10

N583 3733 Polychlorinated alkanes (C₁₀ to C₁₃)

(1.0, except for those members of the category that have an average chain length of 12 carbons and contain an average chlorine content of 60 percent by weight which are subject to the 0.1 percent de minimis)

includes those chemicals defined by the following formula:

 $C_xH_{2x-y+2}CI_y$

where

x = 10 to 13;y = 3 to 12; and

where the average chlorine content ranges from 40-70% with the limiting molecular formulas $C_{10}H_{19}CI_3$ and $C_{13}H_{16}CI_{12}$.

N590 3758 Polycyclic aromatic compounds (PACs) (*PBT*):

Benz[a]anthracene	56-55-3
Benzo[b]fluoranthene	205-99-2
Benzo[j]fluoranthene	205-82-3
Benzo[j,k]fluorene*	206-44—0
Benzo[k]fluoranthene	207-08-9
Benzo[rst]pentaphene	189-55-9
Benzo[a]phenanthrene	218-01-9
Benzo[a]pyrene	50-32-8
Dibenz[a,h]acridine	226-36-8
Dibenz[a,j]acridine	224-42-0
Dibenzo[a,h]anthracene	53-70-3
7H-Dibenzo[c,g]carbazole	194-59-2
Dibenzo[a,e]fluoranthene	5385-75-1
Dibenzo[a,e]pyrene	192-65-4
Dibenzo[a,h]pyrene	189-64-0
Dibenzo[a,I]pyrene	191-30-0
7,12-Dimethylbenz[a]anthracene	57-97-6
Indeno[1,2,3-cd]pyrene	193-39-5
3-Methylcholanthrene*	56-49-5
5-Methylchrysene	3697-24-3
1-Nitropyrene	5522-43-0

Category ¹ <u>Code</u>	RTK <u>Number</u>	Chemical Category Name (de minimis concentration)
N725	2347	Selenium Compounds (1.0)
N740	3008	Silver Compounds (1.0)
N746	3741	Strychnine and salts (1.0)
N760	2809	Thallium Compounds (1.0)
N770	3492	Vanadium Compounds (1.0)
N874	3627	Warfarin and salts (1.0)
N982	3012	Zinc Compounds (1.0)

- 1. When reporting a chemical category on the Release and Pollution Prevention Report, the category code number is to be entered on Section B, #1.1, CAS No. (Category No.), on Section C, #1.1, CAS No. (Category No.), on Section D, #2.2, CAS Number (Category No.), and on the P2-115.
- 2. Methylenebis (phenylisocyanate) (CAS# 101-68-8), a previously listed chemical, has been moved into the "Diisocyanates" category.

APPENDIX D

COUNTY LEAD AGENCY ADDRESSES

Atlantic County Health Department Community Right to Know Coordinator 201 South Shore Road Northfield, NJ 08225-2370 (609) 645-5971 ext. 4395

Bergen County Department of Health Services Community Right to Know Coordinator 327 East Ridgewood Avenue Paramus, NJ 07652-4895 (201) 599-6150

Burlington County Health Department
Community Right to Know Coordinator
Raphael Meadow Health Center, Environmental
Section
15 Pioneer Blvd., PO Box 6000
Westampton, NJ 08060-2631
(609) 265-5515

Camden County Department of Health Community Right to Know Coordinator Jefferson House, Third Floor PO Box 9, Lakeland Road Blackwood, NJ 08012-0009 (856) 374-6046

Cape May County Department of Health Community Right to Know Coordinator Crest Haven Complex Cape May Court House, NJ 08210-1601 (609) 465-1208

Cumberland County Health Department Community Right to Know Coordinator 790 East Commerce Street Bridgeton, NJ 08302-2293 (856) 453-2156

Essex County Dept. of Health & Rehabilitation Community Right to Know Coordinator Environmental Health Office 125 Fairview Avenue, Bldg #14 Cedar Grove, NJ 07009-1399 (973) 228-8152

Gloucester County Department of Health Community Right to Know Coordinator 160 Fries Mill Road Turnersville, NJ 08012-2202 (856) 262-4200

Hudson Regional Health Commission
Community Right to Know Coordinator
Meadowview Campus, 595 County Avenue Bldg. 1
Secaucus, NJ 07094
(201) 223-1133

Hunterdon County Health Department Community Right to Know Coordinator Administration Building Flemington, NJ 08822-1495 (908) 788-1351

Mercer County Clerk's Office Community Right to Know Coordinator 209 South Broad Street P. O. Box 8068 Trenton, NJ 08650 (609) 989-6497 Middlesex County Health Department
Community Right to Know Coordinator
75 Bayard Street, County Admin. Bldg. 5th
Floor
New Brunswick, NJ 08901
(732) 745-3100

Monmouth County Health Department Community Right to Know Coordinator 3435 Route 9 Freehold, NJ 07728-1255 (908) 431-7456 ext. 6796

Morris County Department of Risk Management Community Right to Know Coordinator P. O. Box 900 Morristown, NJ 07963-0900 (973) 285-6113

Ocean County Health Department Community Right to Know Coordinator P. O. Box 2191 Toms River, NJ 08754 (732) 341-9700 ext. 7431

Passaic County Department of Health Right to Know Coordinator 311 Pennsylvania Avenue Paterson, NJ 07503 (973) 225-3643

Salem County Department of Health Community Right to Know Coordinator 98 Market Street
Salem, NJ 08079-1996
(856) 935-7510 ext. 8484

Somerset County Health Department Community Right to Know Coordinator P.O. Box 3000, 20 Grove St. Somerville, NJ 08876 (908) 231-7000

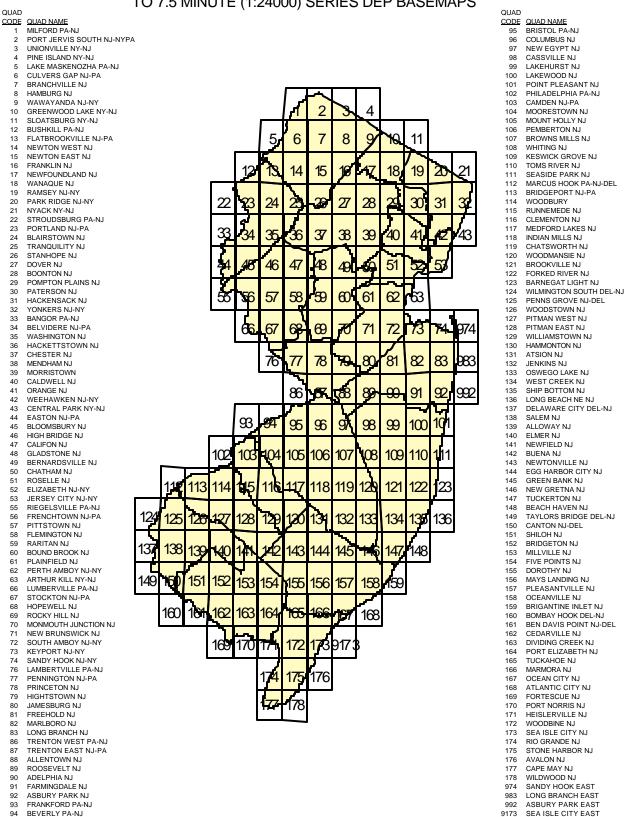
County of Sussex
Department of Health, Public Safety & Senior Services
Community Right to Know Coordinator
Cochran Plaza, 2nd Floor
Newton, NJ 07860
(973) 948-4545

Union County Bureau of Environmental Affairs Community Right to Know Coordinator 300 North Avenue East Westfield, NJ 07090 (908) 654-9890

Warren County Health Department Community Right to Know Coordinator Twin 57 Washington Office Complex 319 W. Washington Avenue, Suite 1 Washington, NJ 07882 (908) 689-6693

APPENDIX E

1991 PHOTOQUAD INDEX TO 7.5 MINUTE (1:24000) SERIES DEP BASEMAPS



This *Maps and Publications Order Form* is not available in the format of this document.

Please contact the Maps and Publications Sales Office at 609-777-1038 for a hard copy of the form.

APPENDIX F

POLLUTION PREVENTION METHODS¹ (adapted from EPA Form R Instructions²)

Good Operating Practices

- W13 Improved maintenance scheduling,
- recordkeeping, or procedures Changed production schedule to W14 minimize equipment and feedstock changeovers
- W19 Other changes in operating practices

<u>Inventory Control</u>

- Instituted procedures to ensure that materials do not stay in inventory beyond shelf life
 Began to test outdated material continue to use if still effective
 Eliminated shelf-life requirements
- W22
- W23 for stable materials
- W24 Instituted better labeling procedures
- Instituted clearinghouse to exchange W25 materials that would otherwise be di scarded
- Other changes in inventory control

Spill and Leak Prevention

- Improved storage or stacking
- procedures
 Improved procedures for loading, W32 unloading, and transfer operations
 Installed overflow alarms or
 automatic shut-off valves
- W33
- W35 Installed vapor recovery systems
- W36 Implemented inspection or monitoring program of potential spill or leak sources
- Other changes made in spill and leak preventi on

Raw Material Modifications

- Increased purity of raw materials
- W42 Substituted raw materials not on the TRI list
- Other raw material modifications

Process Modifications

- Instituted recirculation within a
- W52
- process
 Modified equipment, layout, or piping
 Use of a different process catalyst
 Instituted better controls on W53 operating bulk containers to minimize
- discarding of empty containers Changed from small volume containers to bulk containers to minimize W55
- discarding of empty containers W58 Other process modifications
- For use in reporting on 2000 RPPR Section questions 4.1 and 4.2.
- ² Revised 2000 Instructions, Appendix B.

Cleaning and Degreasing

- W59 Modified stripping/cleaning equipment W60 Changed to mechanical stripping/cleaning devices (from solvents or other materials)
- W61 Changed to aqueous cleaners (from
- solvents or other materials) W63 Modified containment procedures for
- cleaning units W64 Improved draining procedures
- W65 Redesigned parts racks to reduce dragout
- W66 Modified or installed rinse systems
 W67 Improved rinse equipment design
- W68 Improved rinse equipment operation
- W71 Other cleaning and degreasing modi fi cati ons

Surface Preparation and Finishing

- W72 Modified spray systems or equipment
- W73 Substituted coating materials used
- W74 Improved application techniques
- W75 Changed from spray to other system
 W78 Other surface preparation and
 finishing modifications

Product Modifications

- W81 Changed product specifications
- W82 Modified design or composition of products
- W83 Modified packaging W89 Other product modifications

On-Site Recycling Processes

NOTE: On-Site Recycling is considered pollution prevention ONLY IF IN-PROCESS (See N. J. A. C. 7: 1K-1.5).

- R11 Solvents/organic recovery batch still distillation
- R12 Solvents/organic recovery thin-film evaporation
- R13 Solvents/organic recovery -
- fractionation R14 Solvents/organic recovery - solvent **extraction**
- R19 Solvents/organic recovery other R21 Metals recovery electrolytic R22 Metals recovery ion exchange

- R23 Metals recovery acid leaching
- R24 Metals recovery reverse osmosis
- R26 Metals recovery -R27 Metals recovery solvent extraction high temperature
- R28 Metals recovery -R29 Metals recovery -R30 Metals recovery retorting
- secondary smelting
- other
- R40 Acid regeneration
- R99 Other reuse or recovery

APPENDIX G

RELEASE AND POLLUTION PREVENTION REPORT (RPPR)

QUESTIONS AND ANSWERS

Reporting Thresholds

- Q: What are the activity (i.e. "manufacture," "process," and "otherwise use") thresholds applicable to the Release and Pollution Prevention Report for the New Jersey reporting requirements?
- A: Pursuant to the New Jersey Pollution Prevention Act (N.J.S.A. 13:1D-35 et seq.), and regulations adopted pursuant to the Worker and Community Right to Know Act at N.J.A.C. 7:1G-1 et seq., all facilities subject to the reporting requirements of Section 313 of the federal Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 [SARA]) are required to submit a complete Section B form of the New Jersey Release and Pollution Prevention Report for <u>all</u> substances found in Appendices B and C that were manufactured, processed, or otherwise used in excess of <u>10,000 pounds</u> or the lower PBT threshold in calendar year 2000. Additionally, Sections C and D or alternately the P2-115, as appropriate, are to be submitted (refer to reporting instructions for these Sections).

De Minimis Concentrations

- Q: Does the department consider de minimis concentrations on the RPPR?
- A: Yes, concentrations of a listed reportable substance in a mixture below that listed in Appendix B need not be included in threshold determinations, and in throughput, release, and transfer calculations. Chemical categories (Appendix C) are subject to the 10 percent de minimis concentrations unless the substance involved meets the definition of an OSHA carcinogen (see Appendices B and C for de minimis concentrations). OSHA carcinogens are subject to the 0.1 percent de minimis concentration. De minimis concentrations do not apply to the PBT chemicals.

USEPA Alternate Threshold and Comparable RPPR Exclusions

- Q: How does the Alternate Threshold reporting requirements, implemented by USEPA under Section 313 of EPCRA, apply to the reporting of substances on the RPPR? In other words, if a facility meets the Alternate Threshold reporting criteria and can, therefore, submit the USEPA Alternate Threshold Form A in lieu of a full Form R, does the facility have to report the substance on the RPPR?
- A: A facility that meets the Section 313 reporting thresholds, but estimates that the total annual reportable amount also know as total production-related waste (Form R, Section 8.1 through 8.7, Column B) of the substance does not exceed 500 pounds per year, is eligible to apply an alternate manufacture, process, or otherwise use threshold of one million pounds per year to that substance under TRI. New Jersey's applicable laws and regulations have no counterpart to accommodate the low release threshold on the Release and Pollution Prevention Report. Therefore, if you are a TRI covered facility, that is if you submit one or more Forms R to the USEPA for 2000, then you must complete a RPPR Section B for each substance listed in Appendices B and C that is manufactured, processed or otherwise used in excess of 10,000 pounds or the lower PBT threshold in 2000. For further information on the USEPA alternate threshold, contact the EPCRA Reporting Center Hotline at 1(800) 535-0202.

QUESTIONS AND ANSWERS (continued)

Ammonia Reporting and Materials Accounting

- Q: Beginning with reporting year 1994, USEPA 1) modified the ammonia reporting requirements, and 2) deleted ammonium sulfate (solution) and ammonium nitrate (solution) because these and other aqueous ammonium salts are addressed under the ammonia listing. Does the materials accounting process expect throughput calculations to achieve a balance between the "Inputs" and the "Outputs"?
- A: Following promulgation of this federal rule, the DEP came to the realization that this rule and its accompanying modifications of the ammonia listing had serious implications with respect to materials accounting. For those facilities that manufacture, process and/or otherwise use both anhydrous and aqueous forms of ammonia, and, therefore, must report environmental releases and/or off-site transfers of ammonia, it is very likely that you will not achieve a balance in the materials accounting process based upon the reporting of 100% of anhydrous ammonia and 10% of total aqueous ammonia. If you have any questions about this matter or need assistance, please call the Bureau of Chemical Release Information and Prevention at (609) 292-6714.

Quantity Recycled On Site

- Q: Are quantities of a reportable substance that are recycled on site subject to reporting on the RPPR?
- A: Yes, the quantity of a substance that was recycled out-of-process on-site at the facility during the reporting year is subject to reporting under Section B, question #12. DO NOT include in question #12 any recycling that occurs in-process or any quantities of the substance that were sent off site for recycling, energy recovery, treatment or disposal! Quantities shipped off site for recycling, energy recovery, treatment or disposal should be reported under question #21.

Quantity Shipped Off Site for Recycling

- Q: Are quantities of a reportable substance that are shipped off site for recycling or energy recovery subject to reporting on the RPPR?
- A: Yes, if a substance was sent off site for purposes of recycling or energy recovery, the quantity of the substance in the nonproduct output (waste) and the off-site location that received the nonproduct output (waste) are to be reported on the RPPR under Section B, question #21.

Production Quantities and Units

- Q: In question #23, "Quantity and Units of Production Associated with the Substance," how many products should be listed?
- A: List up to four (4) responses for this question (#23) for each reportable substance on the RPPR. On a separate attachment you are required to list up to six (6) additional products, if applicable, for a total of 10 products associated with the reported substance. Be sure to report the products that require the largest quantities of the reportable substance! Be sure that the facility identification number (FAC_ID), the CAS # or category number, and substance or category name be included on all attachments to the RPPR.

COMMONLY NOTED REPORTING ERRORS

Quantity Consumed On Site (Section B. #8), and Quantity Shipped Off Site As (Or In) Product (Section B. #9)

Error: The reported quantity consumed on site is identical to the reported quantity shipped off site as (or in) product.

A substance is consumed on site when a chemical change occurs to that substance. A chemical reaction results in a change where a rearrangement of the atoms, ions, or radicals of one or more substances results in the formation of a new substance (or substances) often having entirely different properties. Chemical changes should be distinguished from physical changes, in which only the state or condition of a substance is modified, its chemical nature remaining the same.

Do not report in Section B. #8 any quantity of a substance that was incorporated into a product as a formulation component or as an article component. This could result in a double counting of quantities of the substance and create a discrepancy in the materials accounting process. These quantities should be reported under question #9, quantity shipped off site as (or in) product, or under question #10, ending inventory, as appropriate. (Refer to the instructions on pages 15 and 16.)

Total Discharge to Publicly Owned Treatment Works (POTW) (Section B. #17)

Error: The quantity reported as total discharge to a POTW is identical to a reported quantity transferred to other off-site locations (#21). Additionally, the POTW is listed as the other off-site location.

If there is a discharge of wastewater containing a reportable substance to a POTW, the quantity of the substance is reported in Section B. #17. (Refer to the instructions on page 18.)

Transfers to Other Off-Site Locations (Section B. #21)

Error: A POTW is listed as an "other off-site location" along with a reported quantity of a waste transfer.

<u>Do not</u> report discharges to POTWs in question #21. Section B. #21 is for transfers to other offsite locations, not including POTWs, for purposes of recycling, energy recovery, waste treatment, or disposal. (Refer to the instructions on page 19.)

Quantity And Units of Production (Section B. #23)

Error: This question is not answered.

This question must be completed. (Refer to the instructions on page 22.)

Should you have further questions regarding completion of the RPPR, contact the DEP's Bureau of Chemical Release Information and Prevention at (609) 292-6714. If you have any questions about Pollution Prevention reporting requirements, call the Office of Pollution Prevention and Permit Coordination at (609) 777-0518.